

GEI Consultants

**Greenpoint Energy Center**

# Remedial Investigation Report

287 Maspeth Avenue, Brooklyn, New York 11211
Site #224052

**Submitted to:**
National Grid
175 East Old Country Road
Hicksville, NY 11801

**Submitted by:**
GEI Consultants, Inc. DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture
1000 New York Avenue, Suite B
Huntington Station, NY 11746
631.760.9300

June 2026
Project No. 125180



Christopher Morris, P.G.
Project Manager

David B. Terry, P.G.
Vice President

# Table of Contents

**Standard Limitations and Disclaimer ..... x**

**Acronyms and Abbreviations ..... xi**

**Executive Summary ..... xv**

**1. Introduction ..... 28**
1.1. Investigation Chronology 31
1.2. Remedial Investigation Purpose and Objectives 31
1.3. Report Organization 32

**2. Site Setting and Background ..... 33**
2.1. Site Background 33
2.2. Site Geographic History 34
2.3. Site Ownership and Operational History 35
2.3.1. Pre-MGP Era 35
2.3.2. MGP Era 35
2.3.3. Post-MGP Era to Present 36
2.3.4. Onsite Spill Records 37
2.4. Surrounding Property Use 37
2.5. Physical and Environmental Sampling 38
2.5.1. Regional Geology 38
2.5.2. Regional Hydrogeology 40
2.5.3. Regional Water Use 40
2.6. Previous Investigations and IRMs 41
2.6.1. On-Site 41
2.6.2. Adjacent Off-Site 47

**3. PDI and Remedial Investigation Scope and Methods ..... 55**
3.1. Historical Data/Records Review 55
3.2. Underground Utility Clearance 55
3.3. Sample Collection and Analysis 55
3.4. Soil Investigations 56
3.4.1. Surface Soil 56
3.4.2. Test Pits 57
3.4.3. Subsurface Soil Borings 58
3.4.4. Surficial and Subsurface Soil Analysis 60
3.4.5. PDI Geotechnical Investigation 61

3.5. Groundwater Monitoring Well Installation 61
3.6. Groundwater Monitoring 62
3.6.1. Depth-to Water Measurements 62
3.6.2. NAPL Measurements 63
3.6.3. Groundwater Purging 63
3.6.4. Groundwater Analysis 63
3.6.5. DNAPL Chemical Analysis 64
3.7. Sediment Investigation 64
3.7.1. SED-Series Borings 65
3.7.1.1. Surface Sediment Sampling 65
3.7.1.2. Subsurface Sediment Sampling 65
3.7.1.3. Analysis 65
3.7.2. GT- and SB-Series Borings 66
3.8. Soil Vapor Intrusion Investigation 67
3.9. Piezometer Installations 68
3.10. Recovery Well Installations 69
3.11. Stormwater Evaluation 69
3.12. Hydrogeologic Studies 70
3.12.1. Hydraulic Conductivity Testing 70
3.12.2. Groundwater Model 70
3.13. Supplemental Investigations 71
3.13.1. Loading Platform Area Investigation 71
3.13.2. Emerging Contaminant Groundwater Investigation 72
3.13.3. 2024/2025 Additional Groundwater Sampling Event 73
3.13.4. Capital Improvement Projects 73
3.14. Site Survey 74
3.15. Community Air Monitoring 74
3.16. Investigation-Derived Waste Management 75
3.17. Quality Assurance/Quality Control 75
3.18. Data Reduction and Reporting 75

**4. Geologic and Hydrogeologic Characterization ..... 77**

4.1. Site Geology 77
4.1.1. Fill 77
4.1.2. Marsh Deposits 77
4.1.3. Intermediate Sand/Clay 78
4.1.4. Gardiners Clay 78
4.1.5. Jameco Gravel and Bedrock 78
4.2. Site Hydrogeology 79
4.2.1. Upper Glacial Aquifer – Shallow (Water Table) Zone 79
4.2.2. Upper Glacial Aquifer – Intermediate Zone 80

4.2.3. Upper Glacial Aquifer – Deep Zone 81
4.2.4. Vertical Head Potentials 81
4.3. Groundwater Model Results 82
**5. Nature and Extent of Impacts 84**
5.1. Identification of Environmental Impacts 84
5.1.1. Physical Observations and Descriptions of Contaminated Soil 84
5.1.2. Analytical Results and Comparisons 85
5.2. Loading Platform Area 88
5.2.1. Surface Soils 88
5.2.2. Subsurface Soils 89
5.2.2.1. Shallow (0 to 25 feet bgs) 89
5.2.2.2. Intermediate (25 to 60 feet bgs) 90
5.2.2.3. Deep (>60 feet bgs) 92
5.2.3. Groundwater 93
5.2.3.1. Shallow (<El. -20 feet) 94
5.2.3.2. Intermediate (El. -20 to -50 feet) 95
5.2.3.3. Deep (>El. -50 feet) 97
5.2.4. NAPL 99
5.2.4.1. Sediment 101
5.2.5. Stormwater Evaluation 102
5.3. Maspeth Alignment 103
5.3.1. Surface Soil 103
5.3.2. Subsurface Soils 104
5.3.2.1. Shallow (0 to 25 feet bgs) 104
5.3.2.2. Intermediate (25 to 60 feet bgs) 108
5.3.2.3. Deep (>60 feet bgs) 109
5.3.3. Groundwater 109
5.3.3.1. Shallow (<El. -20 feet) 110
5.3.3.2. Intermediate (El. -20 to -50 feet) 113
5.3.3.3. Deep (>El. -50 feet) 116
5.3.4. NAPL 117
5.4. Site Interior 118
5.4.1. Surface Soil 119
5.4.2. Subsurface Soils 120
5.4.2.1. Shallow (0 – 25 feet bgs) 120
5.4.2.2. Intermediate (25 to 60 feet bgs) 125
5.4.2.3. Deep (>60 feet bgs) 127
5.4.3. Groundwater 127
5.4.3.1. Shallow (<El. -20 feet) 127
5.4.3.2. Intermediate (El. -20 to -50 feet) 129

5.4.3.3. Deep (>El. -50 feet) 131
5.4.4. NAPL 133
5.5. Soil Vapor Intrusion Assessment 133
5.5.1. Facilities Building (Building 21) 134
5.5.2. Transportation Building (Building D) 135
5.5.3. Stores Building (Building C) 136
5.5.4. Building 11 137
5.5.5. Gatehouse (Building A) 138
5.5.6. LNG Guard House 138
5.5.7. LNG North Storage Building 139
5.5.8. Service Building (Building B) 140
5.5.9. LNG South Storage Building 140
5.5.10. LNG Control House 140
5.5.11. Meter Operations Building 140
5.5.12. Building 12 141
5.5.13. S&S Building (Building 19) 141
5.5.14. Welding Shop (Building 18) 141
5.5.15. Mitigation and Monitoring 142
**6. Qualitative Human Health Exposure Assessment ..... 145**
6.1. Site Setting 145
6.2. Exposure Assessment 145
6.2.1. Potential Sources 146
6.2.1.1. Surface Soil 146
6.2.1.2. Subsurface Soil 147
6.2.1.3. Groundwater 148
6.2.1.4. Sub-Slab Vapor and Indoor/Ambient Air 151
6.2.1.5. Surface Water and Sediment in Adjacent Water Bodies (Newtown Creek and English Kill) 153
6.2.2. Potential Release Mechanisms 153
6.2.3. Potential Human Exposure Points, Exposure Routes and Receptor Populations 154
6.2.3.1. On-Site Receptors 155
6.2.3.2. Off-Site Receptors 157
6.2.4. Summary of Receptors and Potentially Complete Exposure Pathways 158
6.3. Conclusions 159
**7. Fish and Wildlife Resource Impact Analysis ..... 161**
7.1. Need for a FWRIA 161
7.2. Part 1: Resource Characterization 162
7.2.1. Identification of Fish and Wildlife Resources 163

7.2.2. Description of Resources 164
7.2.3. Contaminant Migration Pathways 164
7.2.3.1. Lateral and Vertical NAPL Migration 165
7.2.3.2. Groundwater 165
7.2.3.3. Stormwater 166
7.2.4. Contaminants of Potential Ecological Concern 166
7.3. Conclusions 167

**8. Conceptual Site Model ..... 168**
8.1. Introduction 168
8.2. NAPL 168
8.2.1. Transport and Migration Mechanics 168
8.2.2. NAPL Occurrence 169
8.2.2.1. Loading Platform Areas 1 & 2 169
8.2.2.2. Sediment 170
8.2.3. Maspeth Alignment (Areas 4 and 5) 171
8.2.4. Site Interior Areas 3, 6, 7, 8, and 9 171
8.3. Soils 172
8.4. Dissolved Phase Contamination 172
8.5. Soil Vapor 174
8.6. Ecological and Human Receptors 175

**9. Summary and Conclusions ..... 176**
9.1. Summary 176
9.1.1. Site Geology 177
9.1.2. Site Hydrogeology 177
9.1.3. NAPL 177
9.1.4. Soil 178
9.1.5. Groundwater 179
9.1.6. Soil Vapor 180
9.2. Conclusions 181
9.2.1. NAPL Sources 181
9.2.2. Soil 182
9.2.3. Groundwater 183
9.2.4. Soil Vapor 184
9.2.5. Qualitative Human Health Exposure Assessment 184
9.2.6. Fish and Wildlife Resources Impact Analysis 185

**10. References ..... 186**

## List of Figures

Figure 7a. NYSDEC Environmental Resource Map 163

## Tables

Table 1 On-Site Spill Summary
Table 2 Identified Potentially Responsible Parties – Parcels Within Approximately 500 feet
Table 3 Sampling Rationale
Table 4 Monitoring Well Construction Details and Groundwater Elevations Summary
Table 5 DNAPL Monitoring Summary
Table 6 Estimated Hydraulic Conductivity Values
Table 7 Summary of Calculated Horizontal Hydraulic Aquifer Properties
Table 8 Summary of Calculated Vertical Hydraulic Gradients
Table 9 Surface Soil Analytical Results
Table 10 Subsurface Soil Analytical Results – Loading Platform Area
Table 11 Subsurface Soil Analytical Results – Maspeth Alignment
Table 12 Subsurface Soil Analytical Results – Site Interior
Table 13 Typical Metals Background Concentrations – Eastern United States
Table 14 Groundwater Analytical Results – Loading Platform Area
Table 15 Groundwater Analytical Results – Maspeth Alignment
Table 16 Groundwater Analytical Results – Site Interior
Table 17 Soil Intrusion Investigation Analytical Results
Table 18 Forensic Soil Analytical Results
Table 19 Forensic NAPL Analytical Results
Table 20 Statistical Exceedance Summary
Table 21 Sediment Sample Results

# Figures

Figure 1 Site Location Map
Figure 2 Investigation Phase and Area Boundaries
Figure 3 Current Features and Site Boundaries
Figure 4 Surrounding Land Use Map
Figure 5 Pre-MGP Era Facilities
Figure 6 PRP Locations
Figure 7 Generalized Profile of Soil Conditions
Figure 8 IRM and Remedial Excavation Locations
Figure 9 Pre-Design Investigation Locations
Figure 10 Phase 1 Sample Locations
Figure 11 Phase 2 Sample Locations
Figure 12 Phase 3 Sample Locations
Figure 13 Monitoring and Recovery Well and Piezometer Location Map
Figure 14 SVI Sample Locations
Figure 15 Subsurface Profile A
Figure 16 Subsurface Profile B
Figure 17 Subsurface Profile C
Figure 18 Subsurface Profile D
Figure 19 Marsh Deposits Locations
Figure 20 Groundwater Table Elevation Contours 2012
Figure 21 Intermediate Zone Groundwater Elevation Contours 2012
Figure 22 Deep Zone Groundwater Elevation Contours 2012
Figure 23 Groundwater Table Elevation Contours 2015
Figure 24 Intermediate Zone Groundwater Elevation Contours 2015
Figure 25 Deep Zone Groundwater Elevation Contours 2015
Figure 26 Groundwater Table Elevation Contours 2017
Figure 27 Intermediate Zone Groundwater Elevation Contours 2017
Figure 28 Deep Zone Groundwater Elevation Contours 2017
Figure 29 Groundwater Table Elevation Contours 2024
Figure 30 Intermediate Zone Groundwater Elevation Contours 2024
Figure 31 Deep Zone Groundwater Elevation Contours 2024
Figure 32 Soil PCB Exceedances of the UUSCOs
Figure 33 Groundwater PCB Analytical Summary
Figure 34 DNAPL Thickness Rebound Graphs

# Plates

Plate 1 Historical Structures and Remedial Investigation Areas
Plate 2 Previous Investigation Locations
Plate 3 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Areas 1, 2, 3
Plate 4 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 4
Plate 5 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 5
Plate 6 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 6 & 9
Plate 7 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 7
Plate 8 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 8 – West
Plate 9 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 8 – East
Plate 10 Intermediate Subsurface Soil Analytical Summary (25-60 ft bgs)
Plate 11 Deep Subsurface Soil Analytical Summary (>60 ft bgs)
Plate 12 Surface Soil Analytical Summary (
Plate 13 Shallow Groundwater Analytical Summary RI and PDI Phases
Plate 14 Intermediate Groundwater Analytical Summary RI and PDI Phases
Plate 15 Deep Groundwater Analytical Summary RI and PDI Phases
Plate 16 Shallow Groundwater Analytical Summary 2024/2025 Supplemental Phase
Plate 17 Intermediate Groundwater Analytical Summary 2024/2025 Supplemental Phase
Plate 18 Deep Groundwater Analytical Summary 2024/2025 Supplemental Phase

# Appendices

Appendix A Consent Order
Appendix B Remedial Investigation Work Plan, Phase 2/3 Remedial Investigation Work Plan, Supplemental Work Plans, and NYSDEC Approvals
Appendix C PDI Work Plan, Supplemental PDI Work Plan, and NYSDEC Approvals
Appendix D Groundwater Model Investigation Work Plan, NYSDEC Approval, and Groundwater Model Report
Appendix E Loading Platform Area Investigation Work Plan, Report, and NYSDEC Approvals
Appendix F Emerging Contaminant Groundwater Sampling Work, Report and NYSDEC Approval
Appendix G Public Ballfield Surface Soil Summary
Appendix H Soil Vapor Intrusion Summary Reports and SSDS Reports
Appendix I Site-Related Records
Appendix J Historical Investigations and IRMS
Appendix K Waste Disposal Documents (Manifests and Laboratory Reports)
Appendix L Test Pit Logs
Appendix M Boring Logs
Appendix N Geotechnical Testing Results
Appendix O Monitoring Well Construction Logs
Appendix P Groundwater Sampling Forms
Appendix Q Sediment Logs
Appendix R Slug Test Summary Report
Appendix S Laboratory Data and DUSRs

CM:ag
B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\02_PM\RIR\GEI_Draft GPEC RIR Updated 2026-06-01.docx

# Standard Limitations and Disclaimer

This report was prepared exclusively for the use of National Grid. The findings and conclusions, if any provided by GEI in this report, are based solely on the information reported to GEI as of the date of this report. Future investigations or additional information not provided to GEI at the time of this report may result in modification of this report. GEI's scope of work did not include verifying the completeness or accuracy of information provided by others. Accordingly, GEI shall not be liable for any damages, costs, or other consequences resulting from reliance on such information if it is later determined to be inaccurate or incomplete. GEI's professional services for this project have been performed in a manner consistent with that degree of skill and care ordinarily exercised by members of the same profession currently practicing in the same locality, performing similar services under similar conditions. GEI makes no other representations and no warranties, express or implied.

# Acronyms and Abbreviations

| | |
|---|---|
| AGV | Air Guideline Value |
| AGWQS | New York State Ambient Groundwater Quality Standard |
| Anchor | Anchor Environmental, LLC |
| AOC | Administrative Order on Consent |
| AST | Aboveground Storage Tank |
| ASTM | American Society for Testing and Material |
| BASE | USEPA Building Assessment and Survey Evaluation |
| BCF | BCF Oil Refinery Corporation |
| BERA | Baseline Ecological Risk Assessment |
| BHHRA | Baseline Human Health Risk Assessment |
| BTEX | Benzene, Toluene, Ethylbenzene, Xylene |
| BUG | Brooklyn Union Gas |
| CAMP | Community Air Monitoring Program |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| cis-1,2-DCE | cis-1,2-dichloroethene |
| CNG | Compressed Natural Gas |
| COC | Constituents of Concern |
| Cooper Tank | Cooper Tank and Welding Corp. |
| CPT | Cone Penetrometer Test |
| CVOC | Chlorinated Volatile Organic Compound |
| CSM | Conceptual Site Model |
| DER-10 | Technical Guidance for Site Investigation and Remediation |
| DNAPL | Dense Non-Aqueous Phase Liquid |
| DO | Dissolved Oxygen |
| DOT | Department of Transportation |
| DRO | Diesel Range Organics |
| DUSR | Data Usability Summary Report |
| EEA | Energy and Environmental Analysts, Inc. |
| El. | Elevation |
| ELAP | Environmental Laboratory Approval Program |
| Equity | Former Equity Works Manufactured Gas Plant Site |
| ERM | Effects-Range-Median |
| EWP | Excavation Work Plan |
| ESI | Environmental Subsurface Investigation |
| FP&M | Fanning, Phillips and Molnar |
| FS | Feasibility Study |
| FSP | Field Sampling Plan |
| FWRIA | Fish and Wildlife Resource Impact Analysis |

| | |
|---|---|
| GEI | GEI Consultants, Inc. DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture |
| GFE | Gannett Fleming Engineers, P.C. |
| GPEC | Greenpoint Energy Center |
| GTI | Groundwater Technology, Inc. |
| HASP | Health and Safety Plan |
| HHRA | Human Health Risk Assessment |
| IA | Indoor Air |
| ID | Inner Diameter |
| IDW | Investigation Derived Waste |
| IRM | Interim Remedial Measure |
| ISMP | Interim Site Management Plan |
| ISS | In-Situ Stabilization |
| IUSCO | Industrial Use Soil Cleanup Objective |
| LNAPL | Light Non-Aqueous Phase Liquids |
| LNG | Liquified Natural Gas |
| LP | Liquid Petroleum |
| MGP | Manufactured Gas Plant |
| MNA | Monitored Natural Attenuation |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| MTBE | Methyl Tertiary Butyl Ether |
| NAPL | Non-Aqueous Phase Liquids |
| NAD83 | North American Datum 1983 |
| NAVD88 | North American Vertical Datum 1988 |
| ND | Non-Detect |
| NYC | New York City |
| NYCRR | New York State Code of Rules and Regulations |
| NYSDEC | New York State Department of Environmental Conservation |
| NYSDOH | New York State Department of Health |
| OA | Outdoor Air |
| ORP | Oxidation/Reduction Potential |
| OU | Operable Unit |
| PAH | Polycyclic Aromatic Hydrocarbon |
| PCB | Polychlorinated Biphenyl |
| PCE | Perchloroethene |
| PDI | Pre-Design Investigation |
| PFAS | Per- and Polyfluoroalkyl Substances |
| PFOA | Perfluorooctanic Acid |
| PFOS | Perfluorooctanesulfonic Acid |
| PID | Photoionization Detector |
| PRP | Potentially Responsible Parties |
| PS&S | Paulus Sokolowski & Sartor |

| | |
|---|---|
| PSC | Public Service Commission |
| PVC | Polyvinyl Chloride |
| QA/QC | Quality Assurance/Quality Control |
| QAPP | Quality Assurance Project Plan |
| QHHEA | Qualitative Human Health Exposure Assessment |
| RAWP | Remedial Action Work Plan |
| RCRA | Resource Conservation and Recovery Act |
| RI | Remedial Investigation |
| RIWP | Remedial Investigation Work Plan |
| ROW | Right-of-Way |
| S&S | Storage and Service Building |
| Sanborn | Sanborn Fire Insurance |
| SCO | Soil Cleanup Objective |
| SI | Supplemental Investigation |
| SIM | Selective Ion Monitoring |
| SNG | Substitute Natural Gas |
| SS | Sub-Slab |
| SV | Soil Vapor |
| SVI | Soil Vapor Intrusion |
| SVOC | Semi-Volatile Organic Compound |
| TAL | Target Analyte List |
| Trans-1,2-DCE | Trans-1,2-Dichloroethene |
| TCE | Trichloroethene |
| TOC | Total Organic Carbon |
| TPH | Total Petroleum Hydrocarbons |
| TSCA | Toxic Substances Control Act |
| UGA | Upper Glacial Aquifer |
| URS | URA Corporation |
| USCG | United States Coast Guard |
| USCS | Unified Soil Classification System |
| USEPA | United States Environmental Protection Agency |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |
| UUSCO | Unrestricted Use Soil Cleanup Objective |
| VMP | Vapor Monitoring Point |
| VOC | Volatile Organic Compound |
| 1,1-DCA | 1,1-Dichloroethane |
| 1,1-DCE | 1-1,Dichloroethene |
| 1,1,1-TCA | 1,1,1-Trichloroethane |
| 1,2-DCA | 1,2-Dichloroethane |
| **Measurements** | |
| % | percent |
| bgs | below ground surface |

| | |
|---|---|
| cf/d | cubic feet per day |
| cm | Centimeter |
| cm/s | centimeters per second |
| ft/day | feet per day |
| ft/ft | feet per foor |
| gal | Gallon |
| L/min | liters per minute |
| mg/Kg | milligram per kilogram |
| mg/L | milligram per liter |
| msl | mean seal level |
| mV | millivolt |
| ng/L | nanograms per liter |
| NTU | nephelometric turbidity units |
| PM-10 | 10 micrometers |
| ppm | parts per million |
| µg/Kg | microgram per kilogram |
| µg/L | microgram per liter |
| µg/$m^3$ | microgram per cubic meter |

# Executive Summary

On behalf of National Grid, New York, GEI Consultants, Inc. DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture (GEI) conducted a Remedial Investigation (RI) and prepared this RI Report for the Greenpoint Energy Center (GPEC) former manufactured gas plant (MGP) site, (the Site) located in Brooklyn, New York (Figure 1). The RI was performed pursuant to a Multi-Site Order on Consent and Administrative Settlement, Index #A2-0552-0606, executed on March 4, 2007, and modified on May 27, 2008, between National Grid and the New York State Department of Environmental Conservation (NYSDEC). The RI work was performed in a phased approach initially prioritizing areas adjacent to Newtown Creek, and the nearby English Kills, and was conducted under a series of NYSDEC-approved work plans. A description of the phased approach of the RI is provided below.

Phases 1 and 2 of the RI were located on the eastern and southern boundaries of the Site, respectively and were implemented between October 2011 and March 2016. The Phase 1 investigation area was located immediately adjacent to Newtown Creek and also included a small portion of the interior of the Site which was investigated in advance of the installation of a gas regulator station in the area. The Phase 2 investigation area was located along Maspeth Avenue with the nearest water body (English Kills) located several hundred feet to the south of the Site. The Phase 1 and 2 areas were prioritized based on the reported groundwater flow direction and to assess the potential for contamination to migrate beyond the extent of the Site toward the adjacent or nearby water bodies. The Phase 3 investigation area encompassed the remainder of the Site including the Site interior and the western and northern boundaries of the Site and was implemented between April 2016 and July 2019. The investigation phase areas are shown on Figure 2. Several supplemental investigations were conducted between 2017 and 2021 based on comments received from NYSDEC or NYSDOH or recommendations included in the RI Report both prior to and following the initial submission of the RI report in January 2020. Additionally, an additional Sitewide groundwater sampling event was conducted in late 2024 and early 2025, based on comments received on the RI report in February 2024 and as addressed in the comment response letter dated April 12, 2024.

The 117-acre Site is located at 287 Maspeth Avenue in the Greenpoint neighborhood of Brooklyn, Kings County, New York. The Site sits on the banks of Newtown Creek, a United States Environmental Protection Agency (USEPA) Region 2 Superfund site. The Site boundary with Newtown Creek includes a pile supported wooden Loading Platform with a large rip rap wedge surrounding its terminal landside edge (herein referred to as “the Loading Platform”) built over the waters of Newtown Creek. The Newtown Creek Region 2 Superfund Site Study Area is described in the USEPA Administrative Order on Consent (AOC) as encompassing the body of water known as Newtown Creek “as well as the sediments below the water and the water column above the sediments, up to and including the landward edge of the shoreline, and including also any bulkheads or riprap containing the waterbody, except where no bulkhead or riprap exists, then the Study Area shall extend to the ordinary high water mark, as defined in 33 Code of Federal Regulations (CFR) §328(e) and the areal extent of the contamination from such area, but not including upland areas beyond the landward edge of the shoreline (notwithstanding that such upland areas may subsequently be identified as sources of contamination to the waterbody and its sediments or that such upland areas may be included within the scope of the Newtown Creek Superfund

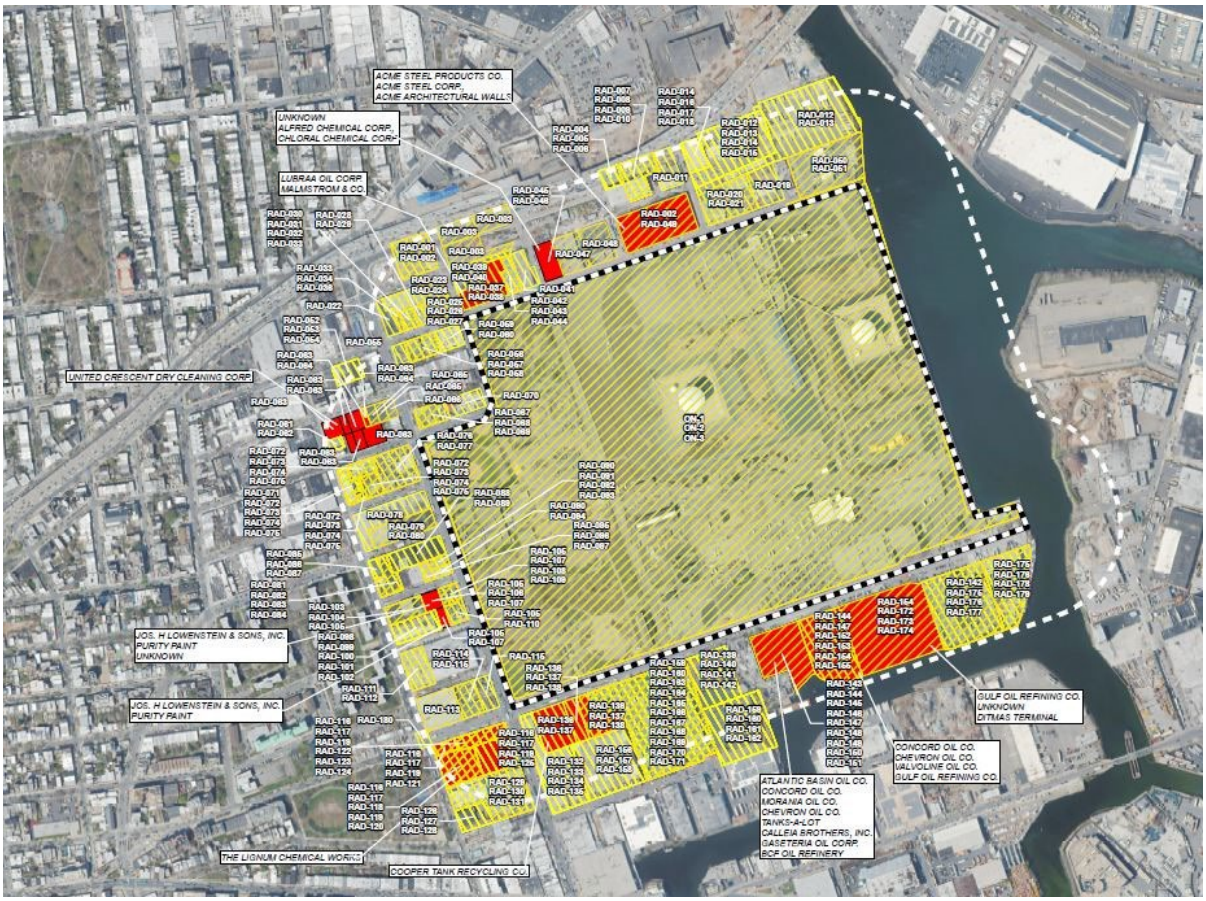
Site as listed pursuant to Section 105(a)(8) of Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA])". As such, the Site boundary is located approximately 42 feet landward from the edge of the timber façade of the Loading Platform. Figure 3 depicts the Site boundary location in relation to the outer edge of the Loading Platform.

Currently, the northern and southern halves of the Site are utilized as a liquified natural gas (LNG) facility and a gas transmission and operations support facility, respectively. The LNG facility occupies approximately 40% of the Site, located within Area 8 and the northern portion of Area 2 on Figure 3, and contains critical infrastructure that distributes natural gas to the New York City metropolitan area, particularly during periods of peak demand. It is vital that the LNG infrastructure at the Site remain in-service for gas distribution in the metropolitan area.

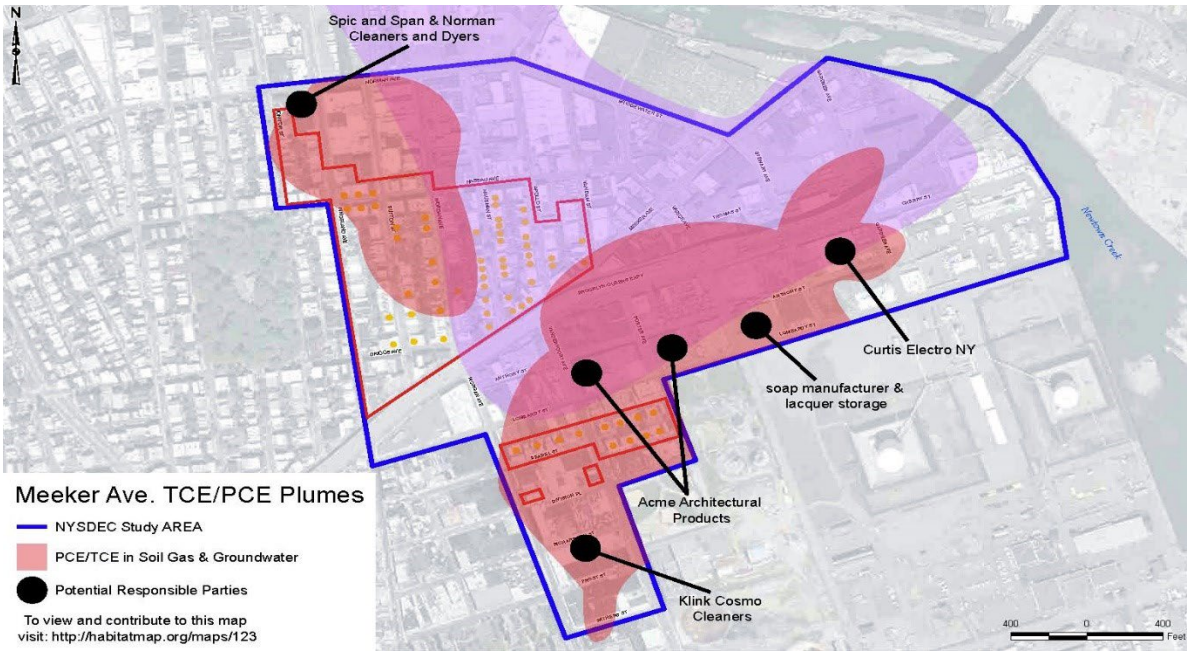
Prior to development of the Site as an energy producing facility, the Site was developed for industrial purposes dating back to at least 1880 as a glue factory, a glass manufacturing facility, and a varnish company that occupied various portions of the Site. Energy production began at the Site when it was developed in 1927 as an MGP and coking facility that operated until approximately 1952. A substitute natural gas plant post-dated the operation of the MGP and coking operations. As stated above, an LNG facility and a gas transmission and operations support facility, currently occupy the northern and southern halves of the Site, respectively. When the Site was developed as an MGP and coking facility, significant shoreline reconfiguration, dredging, and construction of the Loading Platform was conducted. The Loading Platform supported coal and coke storage and facilitated loading and offloading of these materials from vessels on Newtown Creek.

Coal tar and its constituents are the primary contaminants of interest at MGP sites. Petroleum products were also used and stored as part of the former MGP, as well as at numerous other surrounding facilities. The former MGP and many of the surrounding facilities used and/or produced similar feedstocks and products which can generate similar environmental impacts, including petroleum and non-aqueous phase liquids (NAPLs) or NAPL-like materials. Therefore, the connection between the NAPL and off-Site petroleum impacts and the specific historic MGP operations are not clear in all cases; and the NAPL and petroleum impacts in the vicinity of the Loading Platform may be related to other historic sources located off-Site.

The area surrounding the Site has been heavily industrialized for over 150 years. Numerous potentially responsible parties (PRPs) regarding potential impacts to the Site and Newtown Creek are located within the immediate vicinity of the Site (as shown below). In particular, several petroleum-related facilities, including oil refineries, were located immediately to the south of the Site along Maspeth Avenue and began operations as early as 1904. Some of these facilities were known to handle and discharge to the subsurface some constituents similar to some found on MGP sites. Other PRPs in the area have included dry cleaners, manufacturing operations, metal and machine shops and chemical works to the north and west of the Site. The partial list of PRPs in the vicinity of the Site are shown below and in greater detail on Figure 6 of this report. The petroleum-related facilities, as well as several other facilities in the immediate vicinity of the Site, have been highlighted to emphasize their proximity given the similarity of their known constituents with those of MGP sites.




In particular, impacts from chlorinated volatile organic compounds (CVOCs) have been well documented in the north-northwestern off-Site area as shown below (Meeker Avenue Plume Superfund Site). The Meeker Avenue Plume was added to the USEPA Superfund's National Priorities List in March 2022. CVOCs have also been detected in on-Site groundwater and are known to be derived from the Meeker Avenue Plume and other non-MGP off-Site sources.




Also included in this RI report are investigative findings gathered from several earlier and/or supplemental investigations. An earlier pre-design investigation (PDI) and supplemental PDI were performed to evaluate the potential need for an interim remedial measure (IRM) for NAPL containment along the Loading Platform. The NYSDEC agreed with GEI's PDI findings in a letter dated October 8, 2014, stating that an IRM containment barrier was not warranted at this time because the investigation demonstrated that there were no subsurface NAPL migration pathways from the Site to Newtown Creek sediment. A Loading Platform Area supplemental investigation was performed to evaluate the source of NAPL observed by New York City on Newtown Creek, and GEI concluded in a letter dated November 30, 2017, that there were no identified subsurface NAPL migration pathways from the Site to Newtown Creek sediment, and no potentially mobile NAPL was identified that could account for the NAPL observed by New York City. Upon review of the report, NYSDEC concurred with GEI's Loading Platform Area supplemental investigation conclusion in a letter dated June 26, 2018, concurring that mobile NAPL does not appear to be present in the Loading Platform area adjacent to Newtown Creek.

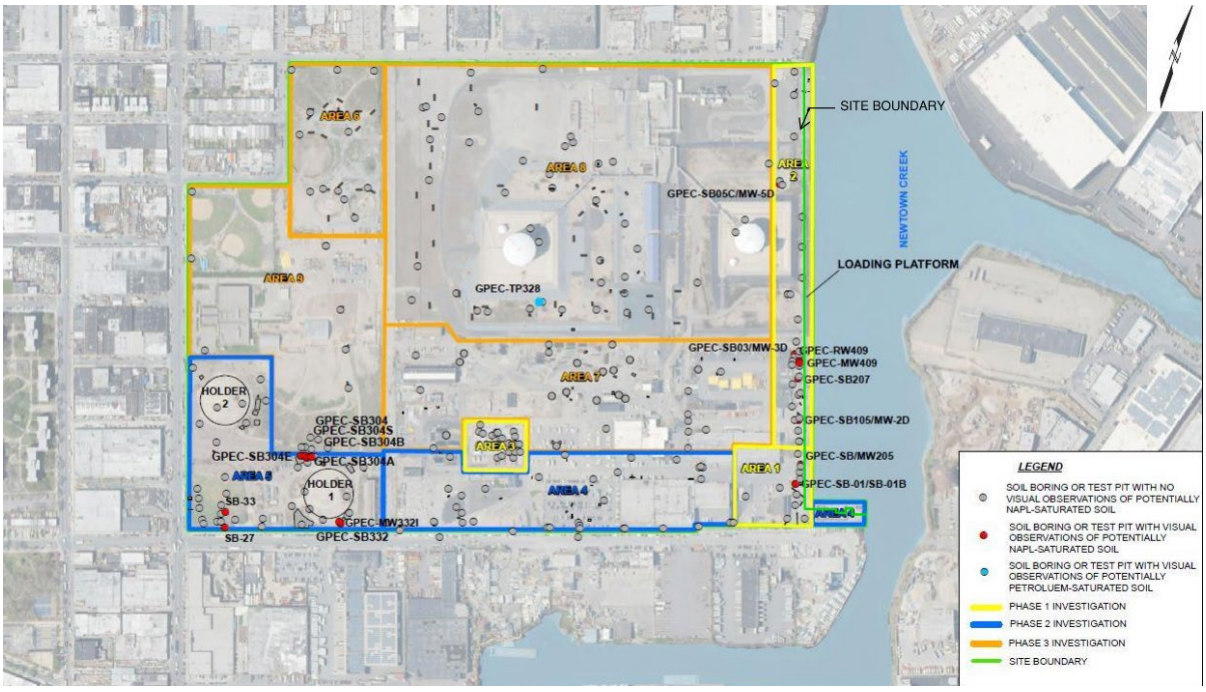
The results of the RI also indicate that there is no potentially mobile NAPL present at shallow elevations landside of the Loading Platform that could affect the sediments or water column of Newtown Creek. The sediments in the creek are present from the approximate elevation of -12 to -28. Dense mobile NAPL (DNAPL) is currently accumulating in only three deep wells (out of 33 wells located in the area adjacent to the Loading Platform). The NAPL in these wells is at a depth (minimum of -43 Elevation or 50 feet below grade) where it cannot affect the sediments or water column of Newtown Creek, which are located at -28 Elevation (35 feet below grade) or above. DNAPL is denser than water and therefore sinks through the soil and groundwater and does not migrate upward like a light NAPL (LNAPL) such as petroleum. No LNAPL has been identified in these or any other wells included in the monthly gauging program.

Shallow sediments outboard of the timber façade of the Loading Platform have been investigated as part of the PDI as shown on Figure 9. NAPL-related impacts included potentially DNAPL-saturated material

that has been identified in this area (Figures 16 and 17). Although the shallow sediments beneath the Loading Platform have not been investigated due to its construction, it is assumed that the sediment outboard and inboard of the Loading Platform façade are similarly impacted from various sources as there is no separation between the two and the inboard area is limited in width.

To characterize the nature and extent of impacts at the Site, the following activities were conducted during the PDI, RI, and supplemental investigations: advanced 245 soil borings, excavated 133 test pits, installed 94 monitoring wells, three recovery wells, and 33 piezometers, aquifer testing; as well as collected 84 surface soil samples, 603 subsurface soil samples, 238 groundwater samples, and 103 soil vapor intrusion (SVI) investigation samples (39 soil vapor [SV] samples, 41 indoor air [IA] samples, and 23 outdoor air [OA] samples). In addition, geotechnical testing and sediment sampling within Newtown Creek were conducted during the PDI to evaluate the potential need for NAPL containment along the Newtown Creek Loading Platform as discussed above. The findings of the PDI, RI, and supplemental investigations are representative of the historic Site conditions since remedial activities conducted on-Site have been limited and only included the IRM conducted in the northeast corner of the Site prior to the construction of the LNG liquefaction facility and the removal of soil for the construction of the Maspeth Regulator Station in the center of the Site (Area 3).

Given the industrial history of the Site and the surrounding area, areas of significant impacts (i.e. areas of potential NAPL saturation) identified during the RI were limited. In general, the significant impacts were identified in two areas along the Site perimeter, in the southern portion of the Loading Platform area and in the vicinity of Holder 1 along Maspeth Avenue, with no significant impacts present in the Site interior. The figure below provides a snapshot of these areas at the Site:




Key findings of the RI activities are as follows:

## NAPL

- No NAPL migration pathways to Newtown Creek or English Kills surface water or sediment have been identified.

## Sediment

- The accumulated sediments beneath the Loading Platform are believed to be impacted similarly as those outboard of the platform which were characterized during the PDI and the Newtown Creek RI, because there is no physical separation, and they are directly connected and the inboard area is limited in width. The shallow accumulated sediments beneath the Loading Platform have been impacted by NAPL the same as sediments outboard of the Loading Platform that have originated from direct discharges (e.g. spills, releases from outfalls, vessels) from multiple sources. The sediments and NAPL beneath the Loading Platform are part of the CERCLA site and as such will be addressed under the USEPA's enforcement action.

## Groundwater

- Impacts from off-Site sources were identified in RI and PDI phases (2009–2012) in the southern portion of the Site (e.g., petroleum-related) and in the north and western portions of the Site (e.g., CVOCs). PFAS sources originating from upgradient, off-site sources were identified during the additional groundwater sampling conducted in late 2024 and early 2025.
- The impacts observed during the RI and PDI phases, including all COCs (BTEX/PAH and CVOCs) were still present during the additional groundwater sampling event (2024-2025) but were generally lower in concentration and reduced in area. PFAS impacts were not investigated during the RI and PDI phases. PFAS was analyzed in a subset of wells during the 2024/2025 additional groundwater sampling event (~35%), with impacts above the established criteria; however, the impacts were higher near the upgradient boundaries of the Site indicating PFAS sources originating from upgradient off-site releases.

Area-specific findings of the RI activities are as follows:

### *Loading Platform Area Findings (Phase 1 Area)*

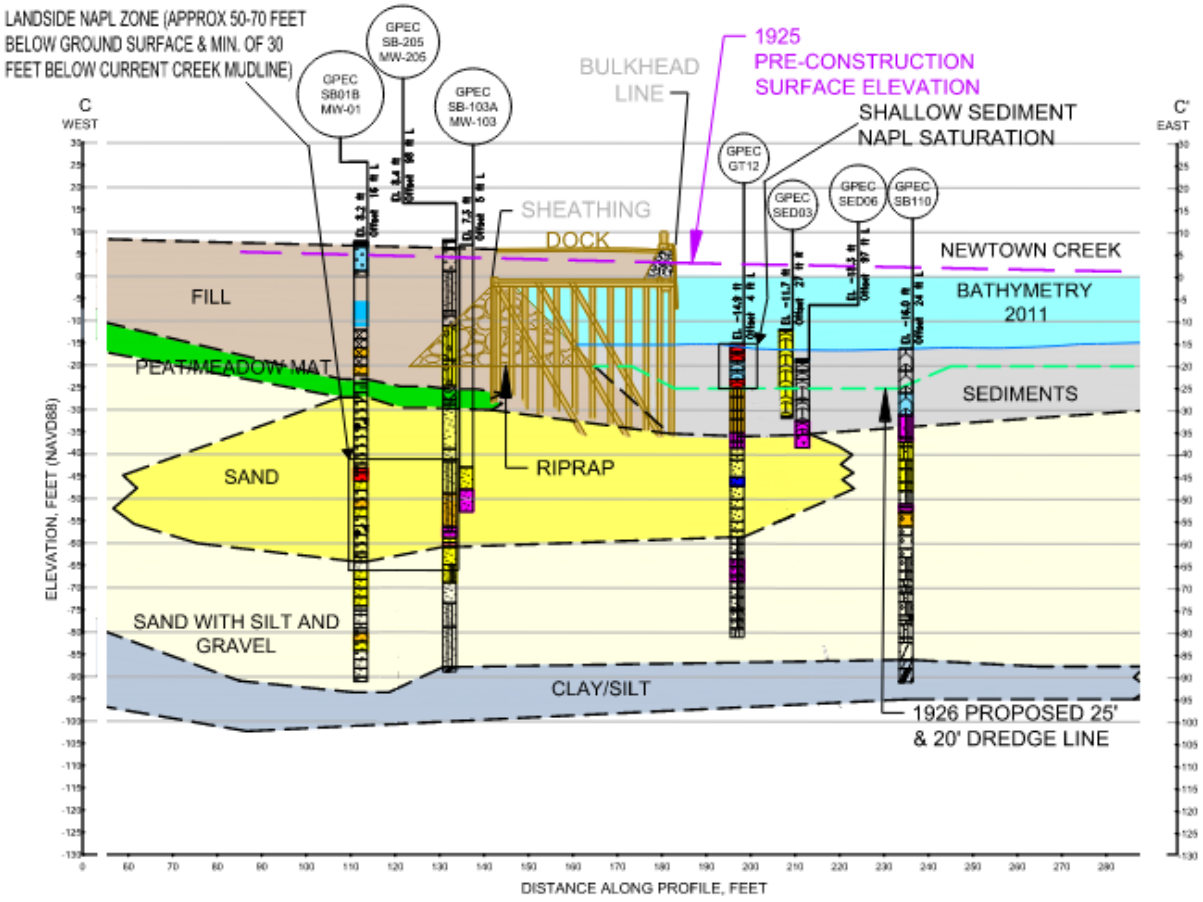
Visual observations of potentially DNAPL-saturated soils encountered in the southern Loading Platform Area were identified at depths of 51 feet or greater with two limited exceptions as discussed below. This corresponds to depths of at least 30 feet below the current sediment surface elevation in Newtown Creek and 15 feet below the original design dredge elevation of -28 feet North American Vertical Datum 1988 (NAVD88) for the creek. In two limited areas located farther north along the Loading Platform, potentially DNAPL-saturated soil is present in the upper portion of the intermediate zone (above 40 feet below ground surface [bgs]). This DNAPL is not mobile based on 8 years of monitoring and the lack of NAPL accumulation in recovery or monitoring wells screened across the potentially saturated zones or the lack of potentially DNAPL-saturated soils in surrounding delineation borings. The potential source of DNAPL in the intermediate zone appears to be the result of migration from accumulated Newtown Creek sediments present outboard and likely beneath the Loading Platform.

This is supported by the landside delineation and the presence of a dip or low spot identified in the fine-grained soil in the area of GPEC-MW409/RW409. As stated above, the accumulated sediments both underneath and outboard of the Loading Platform which are directly connected and likely similarly impacted, are part of the CERCLA site and will be addressed under the USEPA's enforcement action.

Mobile DNAPL has accumulated in three deep wells only (GPEC-MW01R, GPEC-MW-3D and GPEC-MW205) in the southern Loading Platform Area (out of a total of 33 wells in the area adjacent to the waterway) at similar depths to the visual observations of potentially DNAPL-saturated soils (at least 30 feet below the current sediment surface elevation in Newtown Creek and 15 feet below the original design dredge elevation of the creek). The DNAPL has routinely been monitored and recovered (as necessary) in GPEC-MW01R and GPEC-MW205 since 2015. Recovery in these wells is relatively slow with recovery rates generally resulting in less than 2 gallons combined per month. DNAPL was first observed in GPEC-MW-3D in late 2024 following redevelopment of the well for groundwater sampling. DNAPL rebound rates in GPEC-MW-3D will be monitored following the start of recovery in the well in March 2025.

- These visual observations of deep DNAPL do not correspond to visual observations of potentially NAPL-saturated sediments identified by GEI as part of the PDI in Newtown Creek off of the Loading Platform Area (as shown below from Figure 17). There is also no mechanism that can cause the deep DNAPL identified on the landside in the three wells mentioned above to subsequently migrate upward to potentially impact shallow accumulated sediments or surface water. Potential transport mechanisms such as ebullition-facilitated transport of NAPL cannot function at these depths because the overlying hydrostatic pressure head prevents the formation and upward migration of gas bubbles from these depths. Appendix D of the USEPA-approved Final RI Report for Newtown Creek includes the details of the extensive Gas Ebullition studies performed during the Newtown Creek RI. Section 5.1.2.2 of Appendix D discusses the effect of hydrostatic pressure on gas ebullition bubble formation and Figure D5-8 from Appendix D of the approved RI Report demonstrates that gas bubble formation was limited to water column depths shallower than 6 meters (19.7 feet). These findings provide site-specific data demonstrating that ebullition does not occur at the depths where deeper landside DNAPL is observed (GPEC-MW01R, GPEC-MW205 and GPEC-MW-3D) at more than 50 feet below land surface.

**Depth of Landside vs. Waterside DNAPL in Southern Loading Platform Area**




- As a result, the deep land-side occurrence of DNAPL cannot account for the visual observations of NAPL in shallower sediment in Newtown Creek (see figure above), which are likely attributed to historic releases and spills to the creek surface from multiple sources such as, but not limited to, loading and unloading of barges, releases from vessels transporting materials through the turning basin, and deposition of NAPL impacted sediments from multiple off-Site sources in the quiescent area adjacent to the Loading Platform. The area adjacent to and beneath the Loading Platform is a natural depositional area, likely due to the configuration of the land that extends out to the east beyond the Loading Platform on the southern end of the Site (see Figure 3). This is evidenced by the approximate 16 feet of sediment that has accumulated since the creek was dredged in the late 1940s. The NAPL observed on the surface water of Newtown Creek is primarily the result of impacts present in the shallow sediments in the area that may reach the creek surface through ebullition or reworking of sediment from natural forces in the creek, or from activities occurring on the creek (e.g., vessel traffic, NYC aeration system, and discharges from outfalls in and around the turning basin area). DNAPL identified in the shallow native material below Newtown Creek sediments occurs at the depth of the historic creek bottom (following the dredging prior to the construction of the MGP) indicating that the source of DNAPL impacts in this zone is not attributable to subsurface migration from historic MGP gas and tar structures, for which no nearby potential sources or land-side migration pathways were

identified, but is likely attributed to historic releases to the creek surface from multiple sources as discussed above. Any DNAPL that was released in the period immediately following the dredging would have reached the historic creek bottom and migrated downward.

- Only residual (unsaturated) DNAPL impacts were found throughout the Loading Platform area in the shallow and intermediate zones.
- Only 1 of the 100 subsurface soil samples analyzed for total PCBs exceeded the UUSCO for total PCBs of 0.1 mg/Kg. The concentration of total PCBs in this sample was significantly below the IUSCO of 25 mg/Kg. None of the three surface soil samples collected in this area exceeded the UUSCO for total PCBs of 0.1 mg/Kg. PCBs were not detected in any of the 77 groundwater samples collected from 29 wells.

### *Maspeth Avenue Area Findings (Phase 2 Area)*

- Visual observations of potentially DNAPL-saturated soils encountered during Phase 2 of the RI along Maspeth Avenue are limited to the Holder 1 area primarily in the shallow zone, above the meadow mat. The source of NAPL in shallow soils in this area is attributed to historical operations of the former gas holders. The visual observations of potentially DNAPL-saturated shallow soil have been delineated by surrounding borings that are free of potentially DNAPL-saturated soil. Lateral delineation of NAPL in the area included borings that were advanced as part of the Equity RI on the properties located on the opposite side of Maspeth Avenue. A limited area of potentially DNAPL-saturated soil visually observed in deeper soil to the west of Holder 1 is attributed to migration from Equity, inland onto the GPEC property. No pathways for NAPL migration to English Kills are present for the GPEC Site and the results of the Equity RI determined that NAPL did not reach English Kills from Equity.
- Residual (unsaturated) impacts were generally limited to the shallow zone near the holders in the areas investigated along Maspeth Avenue.
- Petroleum-related impacts, including LNAPL historically present in two wells in the area, were primarily located near the southern property boundary adjacent to off-Site petroleum-related facilities in the shallow and upper portions of the intermediate zone. These impacts are attributed to an off-Site source or sources possibly associated with the former BCF Oil Refinery Corporation (BCF) facility and the former Gulf Oil/Ditmas Oil facilities, each of which have documented substantial petroleum releases and LNAPL within on-Site monitoring wells (BCF RI Report, Malcom Pirnie [2010], BCF Draft Upland Site Summary, Anchor QEA [2012], and Former Gulf Oil Terminal Draft Upland Site Summary, Texaco, Inc. [2012]). The monitoring wells with LNAPL on these sites are reportedly upgradient of the Site.
- Seven subsurface soil samples (out of 223 samples collected in the area) and one surface soil sample (out of four collected) were above the UUSCO for total PCBs of 0.1 mg/Kg. All of the subsurface and surface soil sample results were significantly below the IUSCO for total PCBs of 25 mg/Kg. PCB detections above the AGWQS of 0.09 µg/L in groundwater were limited to two samples collected from two wells (out of 74 samples collected from 29 wells in the area), one of which was non-detect (ND) when it was resampled. The other detection above the AGWQS was

likely the result of entrained sediment within the sample and was not part of the dissolve phase groundwater fraction.

### *Site Interior (Phase 3 Area)*

- No visual observations of potentially DNAPL-saturated soil have been identified in the 107 borings advanced within the Site Interior and no measurable NAPL has been visually observed in any of the 41 monitoring wells or five piezometers installed within the area.
- Petroleum saturation was noted in a relatively narrow interval (4 feet) in the shallow zone of one test pit (out of 89 test pits excavated in the Site Interior) located to the south of LNG Tank 2. Petroleum saturation was not noted in adjacent borings designed to delineate the visually observed petroleum saturation.
- Residual impacts were generally limited to the shallow and intermediate zones of Areas 7 and 8 in the interior of the Site. No residual NAPL impacts were found in Areas 6 or 9, excluding some fragments of solid NAPL in one test pit in Area 6.
- Petroleum-related impacts generally limited to staining and odors, were identified sporadically in the Site Interior including in Areas 6 and 8 in the vicinity of former oil and fuel storage tanks.
- Bluish green stained soil and detections of free cyanide indicative of purifier waste was found in one boring and one test pit located adjacent to one another in the area of the former purifiers (Area 9).
- Only 13 subsurface soil samples (out of 280 samples collected in the area) and six surface soil samples (out of 27 collected in the area) were above the UUSCO for total PCBs of 0.1 mg/Kg, all of which were significantly below the IUSCO for total PCBs of 25 mg/Kg. PCB detections above the AGWQS of 0.09 µg/L in groundwater were limited to one sample (out of 88 samples collected from 39 wells in the area), which was likely the result entrained sediment within the sample and was not part of the dissolve phase groundwater fraction.

### *Soil Vapor Intrusion Investigation, Mitigation and Monitoring*

## Soil Vapor Intrusion Investigation

Sub-slab (SS) vapor and IA samples were collected during one initial event in March 2018 followed by limited resampling events in March and June 2019. Buildings were chosen for screening of SV and IA based on their occupancy of a minimum of 8 hours or more during the work week.

Based on the results of the SVI investigation performed in occupied buildings on-Site, SVI does not appear to be occurring. In instances where elevated detections were identified in SV, the corresponding detections in IA were generally lower and in instances where elevated detections were identified in IA, the corresponding detections in SV were generally lower, indicating the absence of SVI. However, based on the elevated detections of several chlorinated compounds in SV in three buildings (Transportation and Stores Buildings and Building 11), mitigation was recommended. Additional recommended actions include identify sources and resample or mitigate based on the concentrations of trichloroethene (TCE)

(Gatehouse Building) and resampling during the heating season (Facilities Building). No further action was recommended for the remaining nine buildings.

Additional sampling was conducted in the Gatehouse Building and the Facilities Building in early 2021 in accordance with a NYSDEC and NYSDOH-approved work plan. A summary of the findings is appended to this report in Appendix H.

## Mitigation and Monitoring

Following the evaluations discussed above, further investigation of the Transportation, Stores and Facilities Buildings and Building 11 was performed to facilitate mitigation design plans. It is noted that the concentrations in the Facilities Building were within the continued monitoring range; however, a mitigation system was planned for installation as a conservative safety measure. As part of this work, a PDI work plan dated July 29, 2021, was drafted and subsequently approved by NYSDEC and NYSDOH on August 4, 2021.

PDI activities commenced in August 2021 with the collection of SS SV samples in the four buildings. Following the receipt of the analytical results, National Grid discussed the results with NYSDEC and NYSDOH and confirmed the locations for pilot testing and associated vapor monitoring points in each building. Pilot testing including the collection of effluent samples was conducted in March 2022.

Following the pilot testing, National Grid evaluated the feasibility of installing SS depressurization systems (SSDSs) in each of the four buildings referenced above. Factors considered for system design and placement included occupancy and use of the buildings, slab thickness, ROIs, IA quality, and the building insulation envelope (tighter the envelope, the more likely SV could be pulled into the building due to vacuums generated during the heating season). The recommendations for each building were discussed with NYSDEC and NYSDOH and were included in a December 6, 2022, report titled “Soil Vapor Mitigation Pre-Design Investigation Summary & Sub-Slab Depressurization Report”, which was approved by the agencies on December 7, 2022. The recommendations from the report included the installation of SSD systems in Building 11 and the Facilities Building and periodic monitoring in the Transportation and Stores Buildings.

The primary reason for periodic monitoring versus SSDS installations in the Transportation and Stores Buildings was the construction and current use of the buildings which helped determine that periodic monitoring was the more practical alternative. Due to the size and complexity of the potential system installations in the Transportation and Stores buildings, the duration of the system installations in these buildings could be significant. The extended duration of installation could potentially create an exposure pathway to IA, which is not currently affected by SVI, during and potentially after installation is completed.

The periodic monitoring in lieu of system installation in the Transportation and Stores Building is to include SV sampling and co-located IA samples along with OA sampling in accordance with the following schedule:

- Annual monitoring in the heating season for the Transportation Building and the eastern half of the Stores Building.

Semiannual monitoring was proposed for the western portion of the Stores Building Installation of the SSDSs in Building 11 and the Facilities Building was conducted between August and October 2023. Startup of the two systems was conducted in September 2023. A construction completion report summarizing the system startups was submitted to the agencies on December 29, 2023.

Post-startup monitoring activities initially included daily fan vacuum and flow monitoring of the systems and effluent sampling at the conclusion of the first week of operation. Following the completion of the start-up period these activities are conducted on a quarterly basis and summarized in annual reports.

Periodic monitoring is ongoing in the Transportation and Stores buildings in accordance with the approved plan. Since monitoring began, the sampling results have continued to indicate that SVI is not occurring. As such, no additional measures are necessary at this time.

### *Qualitative Human Health Exposure Assessment*

A Qualitative Human Health Exposure Assessment (QHHEA) was conducted to assess the potential for exposure to constituents present in impacted soils, groundwater, SV, and IA. This assessment identifies the potential release and transport mechanisms for the COCs, point of exposure and exposure routes, and the receptors that could be exposed to COCs originating from the Site.

The QHHEA determined that there are potentially complete pathways for human receptors to come into contact with chemical compounds at the Site. Outdoor workers, visitors/ trespassers or potential future construction workers could be exposed to contaminants in surface soil on-Site through direct contact or ingestion in areas where impacted surface soil is exposed including the western portion of the Site and in the areas of the LNG tanks. Inhalation of impacted surface soil is possible if contaminants become airborne. A large portion of the Site is covered with buildings, roads, gravel or vegetated surfaces reducing the possibility of impacted surface soil becoming airborne. In the active areas of the western portion of the Site, measures are taken to reduce dust generation. In the area of impacted surface soil near the LNG tanks vehicle traffic is minimal; however, if dust generation is likely, similar measures should be taken. Dust is not currently being generated in these areas of the Site. However, the pathway is potentially complete as the potential for dust generation is present.

Visitors to the public ballfield may also be exposed to impacted surface soil; as such, the exposure pathway in this area is potentially complete. As a result, the public use of this area of the Site has been discontinued. The results of the additional sampling have been included as an addendum to the RI report (Appendix G).

A potentially complete exposure pathway to impacted SV is present to Site indoor workers or visitors should the conditions of the foundation of four on-Site buildings change. This pathway was addressed in two onsite buildings through the installation of SSDSs, and ongoing periodic monitoring for SVI in the remaining two buildings in which there is a potentially complete exposure pathway.

Potential future construction workers who perform excavation work on the Site may also potentially be exposed to contaminants in subsurface soil, SV and groundwater if subsurface excavation work is needed at the Site. Only properly trained field personnel should complete ground-intrusive work at the Site using

methods specified in a Site-specific Health and Safety Plan (HASP) and in the Draft Interim Site Management Plan) ISMP.

### *Fish and Wildlife Resources Impact Analysis*

A Fish and Wildlife Resource Impact Analysis (FWRIA) was conducted to identify actual or potential impacts to fish and wildlife resources at and in the vicinity of the Site. If such impacts were determined to be present, the FWRIA was also designed to determine if further assessment is needed to complete an ecological impact assessment.

The FWRIA determined that there is minimal to no risk for ecological receptor impacts at the Site given the lack of habitat, the industrial nature of the RI Study Area, and the transient nature of wildlife in urban areas. However, Newtown Creek is a potential resource near the Site. Potential pathways that may result in impacts to Newtown Creek resources include historic releases to Newtown Creek and the discharge of dissolved phase groundwater impacts; however, these impacts appear insignificant in comparison to the impacts present in the creek from numerous sources. The on-going CERCLA RI/Feasibility Study (FS) for Newtown Creek and the ultimate remedy will need to address all potential sources to the creek. Further evaluation is best considered in that context.

### *Report Content*

The remainder of this RI report discusses the RI study area and adjacent areas, the scope of work of the PDI, RI and supplemental investigations, the study area hydrology and hydrogeology and the soil, SV and groundwater chemical concentration detections in the RI. Also included is the QHHEA, the FWRIA, a conceptual site model (CSM) and finally, summary and conclusions.

# 1. Introduction

On behalf of National Grid, New York, GEI Consultants, Inc. DBA GEI Consultants Engineering, Geology, Architecture & Landscape Architecture (GEI) conducted a Remedial Investigation (RI) and prepared this RI Report for the Greenpoint Energy Center (GPEC) former manufactured gas plant (MGP) site, (the Site) located in the Greenpoint neighborhood of Brooklyn, New York. The former MGP is located at 287 Maspeth Avenue in Brooklyn, Kings County, New York (Figure 1). The RI was conducted in a phased approach based on geography and the proximity to adjacent or nearby water bodies (Figure 2). Phases 1 and 2 were located on the eastern and southern boundaries of the Site, respectively, and Phase 3 was located on the Site interior and the western and northern boundaries of the Site. The Phase 1 investigation area was located immediately adjacent to Newtown Creek and also included a small portion of the interior of the Site (Area 3) which was investigated in advance of the installation of a regulator station in the area. The Phase 2 investigation area was located along Maspeth Avenue with the nearest water body (English Kills) located several hundred feet to the south of the Site. The Phase 3 investigation area encompassed the remainder of the Site.

The RI was performed pursuant to a Multi-Site Order on Consent and Administrative Settlement, Index #A2-0552-0606, executed on March 4, 2007, and modified on May 27, 2008 (Appendix A), between The Brooklyn Union Gas Company (now d/b/a National Grid, NY) and the New York State Department of Environmental Conservation (NYSDEC).

The fieldwork for the RI was performed in accordance with NYSDEC oversight using procedures described in the NYSDEC-approved Remedial Investigation Work Plan (RIWP) dated June 2012, which described the field investigation activities for Phase 1 and conceptual approach for Phases 2 and 3 of the RI, as well as the Phase 2/3 RIWP dated October 2013. Supplemental work plans including modifications to the number or location of the planned investigation locations (i.e. boring, test pit, monitoring well, or soil vapor [SV]) were submitted prior to the start of each specific investigation; however, the investigative procedures remained the same as outlined in the RIWP and Phase 2/3 RIWP. The RIWP, Phase 2/3 RIWP, supplemental work plans, and NYSDEC approvals are included in Appendix B. The supplemental work plans included:

- “Boring Locations Selection Plan” for Phase 2, dated January 2015
- “Phase 2 Additional Borings, Phase 2 Data Submittal, and Phase 3 test Pit Plan” dated February 2016
- “Phase 3 (Area 7) Boring Plan” dated November 2016
- “Phase 3 (Areas 6, 8 & 9) Test Pit Plan” dated June 2017
- “Phase 3 (Area 6 & 9) Soil Boring and Well Installation Plan” dated October 2017
- “Phase 3 (Area 8) Soil Boring and Well Installation Plan” dated February 2018
- “Phase 3 Soil Vapor Intrusion Investigation Plan” dated November 2017

The following supplemental work plans were submitted after the initial submittal of the draft RI report and were based on comments received from NYSDEC and NYSDOH or recommendations included in the RI report:

- "Additional Soil Vapor Intrusion Sampling Work Plan", dated December 2020
- "Public Ballfield Surface Soil Sampling Work Plan", dated May 2021
- "Sitewide Groundwater Sampling Work Plan", dated August 2024

Also included in this RI report are investigative findings gathered from several earlier and/or supplemental investigations. Details of the supplemental investigations are provided below. Information gathered during capital improvement projects conducted at the Site is included as appropriate. These investigations and capital improvement projects, along with the RI, are generally referred to as "the investigations" in the remaining report text. References to specific investigations are included as needed.

An earlier pre-design investigation (PDI) and supplemental PDI were performed to evaluate the potential need for an interim remedial measure (IRM) for non-aqueous phase liquid (NAPL) containment along the Newtown Creek Loading Platform. Fieldwork conducted during the PDI was performed in accordance with the NYSDEC-approved PDI Work Plan, Cutoff Wall Interim Remedial Measure dated January 9, 2009, and Supplemental Pre-Design Investigation Work Plan Cutoff Wall Interim Remedial Measure dated April 8, 2010. In agreement with NYSDEC and as documented in these work plans, the PDI work was conducted with the express intent that the findings would be incorporated into the RI for the Site. As such, the work was done to meet data quality objectives of the RI and with quality assurance/quality control (QA/QC) procedures and laboratory methods equivalent to the requirements of the RI. Ultimately, the NYSDEC agreed with GEI's PDI findings in a letter dated October 8, 2014, that an IRM containment barrier was not warranted at this time because the investigation demonstrated that there were no subsurface NAPL migration pathways from the Site to Newtown Creek sediment. In the remaining report text this investigation is referred to as the PDI. The PDI and supplemental PDI work plans and NYSDEC approvals are included in Appendix C.

The supplemental investigations conducted at the Site and the rationale for the investigations are as follows:

- A supplemental investigation was performed during Phase 3 of the RI to develop a groundwater model for the Site; referred to as the Groundwater Model Investigation in the remaining report text. Fieldwork was conducted in accordance with the NYSDEC-approved Additional Investigation Work Plan dated December 19, 2016, the RIWP, and the Phase 2/3 RIWP. This investigation is further discussed in Sections 3.12.2 and 4.3. The Groundwater Model Investigation work plan, NYSDEC approval, and details on the model are included in Appendix D.
- A supplemental investigation was performed during Phase 3 of the RI in the Loading Platform area of the Site (Areas 1 and 2, Figure 2) to evaluate whether NAPL observed by New York City on the water surface of Newtown Creek was related to migration of NAPL from the GPEC upland Site. In the remaining report text this investigation is referred to as the Loading Platform Area Investigation. Fieldwork was conducted in accordance with the NYSDEC-approved Loading

Platform Area Investigation Work Plan dated January 11, 2017, the RIWP, and Phase 2/3 RIWP. GEI concluded in a letter dated November 30, 2017, that there were no identified subsurface NAPL migration pathways from the Site to Newtown Creek sediment, and no potentially mobile NAPL was identified that could account for the NAPL observed by New York City. Upon review of the report, the NYSDEC concurred with GEI's Loading Platform Area supplemental investigation conclusion in a letter dated June 26, 2018, that mobile NAPL does not appear to be present in the Loading Platform area adjacent to Newtown Creek. NAPL identified during the investigation does not appear to be mobile due to the lack of NAPL accumulation in a recovery well screened across a potentially saturated interval and the lack of potentially DNAPL-saturated soil in surrounding delineation borings. This investigation is further discussed in Section 3.13.1. The Loading Platform Area Investigation work plan, report, and NYSDEC approvals are included in Appendix E.

- A supplemental investigation was performed at the request of the NYSDEC during Phase 3 of the RI to screen for emerging contaminants (per- and polyfluoroalkyl substances [PFAS] and 1,4-dioxane) in groundwater on-Site; referred to as the Emerging Contaminant Groundwater Investigation in the remaining report text. Fieldwork conducted during the Emerging Contaminant Groundwater Investigation was performed in accordance with the NYSDEC-approved Emerging Contaminant Groundwater Sampling Work Plan dated September 4, 2018. This investigation is further discussed in Section 3.13.2. The Emerging Contaminant Groundwater Investigation work plan, report, and NYSDEC approvals are included in Appendix F.
- A supplemental surface soil investigation was conducted following the initial transmittal of the draft RI report to delineate impacts found in the former public ballfield area. The former public ballfield surface soil work plan and report are included in Appendix G.
- A supplemental soil vapor intrusion (SVI) sampling event was conducted following the initial transmittal of the RI report in two on-Site buildings. The additional SVI sampling work plan and report are included along with the SVI Investigation Summary report, the SVI Investigation Resampling Summary report and the Routine Soil Vapor Intrusion Summary reports in Appendix H.
- An additional Sitewide Groundwater Sampling event was conducted in 2024 and early 2025 following the receipt of comments from NYSDEC on the RI report in February 2024. The rationale for the additional sampling was to provide an updated set of groundwater data to ensure that the CSM represents current conditions, because much of the previous groundwater data was from 2012 or earlier. One well cluster consisting of three wells which had been destroyed were reinstalled as part of this event.

Sampling performed during capital improvement projects followed the procedures included in the RIWP and the Phase 2/3 RIWP. Capital improvement projects are further discussed in Section 3.13.3.

This RI Report addresses the findings from Phases 1, 2, and 3 of the RI and findings from the PDI, supplemental PDI, Groundwater Model Investigation, Loading Platform Area Investigation, Emerging Contaminant Groundwater Investigation, and various capital improvement projects that have occurred at the Site.

## 1.1. Investigation Chronology

As stated above, the RI field activities have been completed and are the focus of this report along with the PDI and supplemental investigations. Capital improvement projects have been conducted at the Site on an as-needed basis. The dates for each phase of the investigation are provided below:

- Cutoff Wall IRM PDI – March and August 2009
- Cutoff Wall IRM PDI (Supplemental Phase) – May and June 2010
- Phase 1 RI – October 2011 – August 2012
- Phase 2 RI – September 2014 – March 2016
- Phase 3 RI – April 2016 – July 2019
- Groundwater Model Investigation – January 2017 – June 2017
- Loading Platform Area Investigation – February 2017 through June 2017
- Emerging Contaminant Groundwater Investigation – October 2018
- Surface Soil Sampling – Former Public Ballfield Area – November – December 2021
- SVI Sampling – March 2019 - February 2021
- Sitewide Groundwater Sampling Event – October 2024 – January 2025

## 1.2. Remedial Investigation Purpose and Objectives

The objectives for the RI program include:

- Evaluation of potential source areas related to former operations at the Site and current and former operations adjacent to the energy facility that may have potentially impacted the Site.
- Evaluate the necessity and potential efficacy of an IRM along the Loading Platform of Newtown Creek.
- Investigate and evaluate the potential need for remediation at the proposed Maspeth Regulator Station. Remedial excavation was conducted to support construction of the Maspeth Gate Station in 2012.
- Evaluation of the nature and extent of any identified contamination.
- Performance of a structures SV survey in accordance with the New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor in the State of New York, with updates (SVI Guidance).
- Development of an environmental and qualitative human health exposure assessment (QHHEA) including the identification of potential pathways of contaminant migration and possible receptors.
- Evaluation of actual or potential impacts to fish and wildlife resources.

- Characterization and identification of potential contaminant sources, as well as contaminant distribution and migration pathways.

## 1.3. Report Organization

This RI Report is organized into nine sections following this introduction.

- Section 2 describes the RI Study Area and adjacent areas, presents historical ownership and operational summary information, provides information regarding the physical and environmental setting, and details of previous investigations.
- Section 3 describes the scope of work of the investigations.
- Section 4 summarizes information regarding the RI Study Area geology and hydrogeology.
- Section 5 summarizes the nature and extent of identified impacts.
- Section 6 presents the QHHEA.
- Section 7 presents the Fish and Wildlife Resource Impact Analysis (FWRIA)
- Section 8 presents the conceptual site model (CSM).
- Section 9 presents a summary and conclusions related to the investigations.
- Section 10 provides a list of references cited in this report.

Tables and figures are included in sections that immediately follow the report text.

# 2. Site Setting and Background

## 2.1. Site Background

The Site is currently a liquified natural gas (LNG) facility, where gas is received, liquefied and stored, and an active gas transmission and operations support facility located in the Greenpoint neighborhood of Brooklyn, New York (Figure 1). Various portions of the Site have been used for industrial purposes throughout history dating back to at least 1870 and generally have included the following operations:

| Approximate Timeframe | Operations |
|---|---|
| 1870-1921 | Demuth Glass Manufacturing Company |
| 1880-1915 | Peter Cooper Glue Factory |
| ~1920-prior to 1951 | Aetna Varnish Company |
| 1927-1968 | MGP Period |
| 1941-1947 | Light Oil Recovery Plant |
| 1949-1979 | Liquified Petroleum Gas Plant |
| 1966-Present | LNG Facility |
| 1973-1985 | Substitute Natural Gas (SNG) Plant |

The Site occupies Tax Block 2837; Lot 1 comprised of approximately 117 acres and is bounded on the south by Maspeth Avenue, on the west by Vandervoort and Porter Avenues, on the north by Division Place and Lombardy Street, and on the east by Newtown Creek. Figure 3 shows the Site boundaries and current Site features. The eastern Site boundary abuts Newtown Creek and includes a pile supported wooden Loading Platform (herein referred to as the "Loading Platform") built over the waters of Newtown Creek. The Newtown Creek Region 2 Superfund Site Study Area is described in the USEPA Administrative Order on Consent (AOC) as encompassing the body of water known as Newtown Creek "as well as the sediments below the water and the water column above the sediments, up to and including the landward edge of the shoreline, and including also any bulkheads or riprap containing the waterbody, except where no bulkhead or riprap exists, then the Study Area shall extend to the ordinary high water mark, as defined in 33 Code of Federal Regulations (CFR) §328(e) and the areal extent of the contamination from such area, but not including upland areas beyond the landward edge of the shoreline (notwithstanding that such upland areas may subsequently be identified as sources of contamination to the waterbody and its sediments or that such upland areas may be included within the scope of the Newtown Creek Superfund Site as listed pursuant to Section 105(a)(8) of Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA])". As such, the Site boundary is located approximately 42 feet landward from the edge of the timber façade of the Loading Platform. Figure 3 depicts the Site boundary location in relation to the outer edge of the Loading Platform.

The area surrounding the Site is predominantly industrial and manufacturing, with some commercial, and residential buildings to the northwest (Figure 4). The Site is generally flat, with a ground surface between approximately elevation (El.) of 10 and 20 feet above mean sea level (msl), except for the

northwestern portion of the Site which rises to approximately El. 65 feet above msl. All elevations are in units of feet referenced to North American Vertical Datum of 1988 (NAVD88).

The Site is currently divided internally into two major operational areas: the LNG facility occupying the northern half of the Site, and gas transmission and operations support facilities are on the southern half of the Site. The entire Site is fenced along its perimeter with the LNG facility fenced internally, separating it from the operations area. The Site operates 24 hours per day with full-time Site-wide security.

The Site is adjacent to Newtown Creek, a United States Environmental Protection Agency (USEPA) National Priorities List (NPL) site. A RI focused on the Creek is being conducted by the respondents to a 2011 USEPA Administrative Settlement Agreement and Order on Consent for Remedial Investigation and Feasibility Study (FS).

The area surrounding Newtown Creek has an extensive history of industrial development and use dating back to the 1800s. By the 1850s, more than 50 petroleum refineries were located along its banks, and by the close of the 19$^{th}$ century, the Creek was lined with oil refineries and petrochemical plants, fertilizer and glue factories, copper-smelting and fat rendering plants, shipbuilders, sugar refineries, hide tanning plants, canneries, governmental facilities, sawmills, paint works, and lumber and coal yards. During its industrial past, Newtown Creek was crowded with commercial vessels, including large boats bringing in raw materials and fuel, and taking out oil, fat, varnish, chemicals, and metals.

The majority of the shoreline area of Newtown Creek is currently zoned for heavy manufacturing and industrial use with a small portion, near the mouth of the Creek, zoned for residential use. Currently, the predominant land use around Newtown Creek includes industrial facilities, petroleum bulk storage facilities, manufacturing facilities, warehouses, transportation, and transportation infrastructure including rail and highways, utility facilities and a large municipal Water Pollution Control Plant.

## 2.2. Site Geographic History

During the late 1800s, the shoreline and drainage features of the Site were different from when the MGP facility was built in the 1920s. During the 1800s, Newtown Creek to the east of the Site consisted of two channels that wrapped around Mussel Island (Plate 1). There was also a drainage feature from the central part of the Site which flowed south into what is now the English Kills channel of Newtown Creek. Both the original pre-1900 Newtown Creek channel to the east and the drainage to the south have some bearing on the groundwater flow regime at the Site today. By 1928, Mussel Island and other sediments had been dredged, the drainage feature to the south had been filled, and the area between the former shoreline and the current Loading Platform had been filled with imported fill. The historic plant operation features were constructed inland of the filled area, beginning approximately 500 feet from the current Loading Platform. Plate 1 shows the former location of Mussel Island and historical plant operation features which are described in greater detail below.

The area of the creek adjacent to the current Loading Platform system was dredged between 1927 and 1929 and most recently in 1949 to allow for construction of the pile-supported Loading Platform. The platform extends approximately 42 feet inland from its water-facing edge and has a large rip rap wedge surrounding its terminal landside edge. As shown on Plate 1, portions of the area behind the Loading

Platform were also filled during this time. The Loading Platform supported coal and coke storage and facilitated loading and offloading of these materials from vessels on Newtown Creek. The dredging also provided access for barges or other large vessels to the Site, which were primarily used for loading of coal and sale/off-Site transport of MGP-related by-products. Dredging of the Creek adjacent to the Loading Platform Area was conducted to a depth of approximately 30 feet below the water line, to approximate El. -28 feet. This depth represents the historic Creek bottom, which is an important factor in NAPL distribution, source areas and migration pathways discussed in later sections. Sediments above El. -28 feet have been deposited subsequent to the historic dredging operation. Note that this "dredging" is not environmental dredging and so significant sediment distribution is reasonably expected.

## 2.3. Site Ownership and Operational History

The Site was owned and operated by Brooklyn Union Gas (BUG), through most of the 20th century, except for a period of years (1928–1930) when the gas plant was built and directly owned and operated by Koppers (BUG Public Service Commission [PSC] Reports 1926-1940). GEI has performed a historical record review for the Site which included Sanborn Fire Insurance (Sanborn) maps, old plant drawings, Brown's Directories of American Gas Companies, aerial photographs, BUG annual reports and Reports to the New York Public Service Commission from BUG. Based on the records review, the following is a general description of the Site development and history. Historical Site features are shown on Plate 1.

### *2.3.1. Pre-MGP Era*

Prior to the purchase of the property by BUG, the Site contained two other industries in the mid-1800s. Peter Cooper, a major New York industrialist, built a glue factory on Maspeth Avenue near Newtown Creek in 1880. It appears on both the 1888 and 1907 Sanborn maps. The Peter Cooper Glue Factory was noted to be the largest in the country in the mid-1800s and ceased operations around 1915. To the north of the glue factory was the Demuth Glass Manufacturing Company near Lombardy Street and Newtown Creek which started operations around 1870. It appears on the 1888 Sanborn map and ceased operations around 1921 (Appendix I). The Aetna Varnish company was located on the southwest corner of the property near the intersection of Maspeth and Vandervoort Avenues and appeared on the 1933 Sanborn map. The former locations of these facilities are shown on Figure 5.

### *2.3.2. MGP Era*

Gas was manufactured at the Site over an approximate 40-year period between 1927 and 1968. During that time, gas was made using varying processes including carbureted water gas, coke oven gas, and oil gas in different time frames and stages. When the first plant was built in 1927 (discussed in further detail below), manufactured gas production was 20 million cubic feet per day (cf/d).

Plate 1 depicts the locations of the historic gas manufacturing related structures discussed below. Construction started on the water gas plant in 1925 and by 1927 the plant was operational as was the first of two large, waterless (tar-seal) gas holders in the southwest corner of the Site. The 15 million-cubic-foot gas holder measured 254 feet in diameter and over 330 feet tall. This distribution gas holder and eventually a second 17 million-cubic foot waterless gas holder built in 1949, made up

what was called the Maspeth Station. The water gas plant included a boiler house separate from the generator house. Coal that provided fuel for the water gas generators was brought in by ships that were docked along the Loading Platform on Newtown Creek. A coal and coke storage yard separated the gas generator building from the Creek by a distance of over 625 feet. The relief holder for the water gas plant held 1 million cubic feet of gas and was located directly to the west (inland) of the generator house. The purifiers were situated well to the west (inland of Newtown Creek) of the generator house on the other side of Varick Avenue, a plant road that ran north to south through the center of the Site. Oil tanks were located on Varick Avenue.

A year after the water gas plant was built the Koppers gas plant was built and operational (BUG PSC Reports 1926-1940). The Koppers gas plant was adjacent to and south of the water gas plant. An associated by-product plant was located close to Maspeth Avenue. The gas plant had two batteries of 25 ovens each along with all the ancillary facilities such as quenching tower, gas coolers, gas scrubbers, coke sizing mill, and related facilities. A 1933 photograph of the Greenpoint Works and the Koppers Coke Oven gas plant, presented in Appendix I, Aerial Photographs, shows most of the unit operations listed above.

The gas works at the Site remained with the same configuration through the 1930s, then in 1941, at the start of World War II, a light oil plant was built adjacent to and west of the by-product plant. As with other light oil plants around the country at the time, it produced ingredients for the manufacture of munitions. The by-products and light oil plants remained at the Site until 1952 when the coke plant was decommissioned.

After 1950 with the introduction of natural gas and LNG, manufactured gas production declined and the MGP facilities were decommissioned between 1952 and 1977. The Department of Public Service reports for Brooklyn Union Gas from 1953 through 1968 state that liquid petroleum (LP), oil gas and refinery gas were “for standby purposes.” The production quantities listed in the Public Service reports do not indicate use of the MGP facilities for base load. The refinery gas process was retired in 1960 and only the oil gas and LP air processes were still in use through 1968.

### *2.3.3. Post-MGP Era to Present*

As natural gas was brought into Brooklyn in the early 1950s, the gas plants were retired and demolished. Some of the other manufactured gas processes, i.e. LP, oil gas and refinery gas, were used only for standby purposes. By the late 1960s, LNG was stored at the Site and in the mid-1970s a modern SNG plant was built which produced 60 million cf/d. The SNG was used for base load conditions. It operated for approximately 12 years before closure in 1985. The LNG facility still stands today, and the Site is used as a major regional regulator station for the natural gas network. The LNG facility occupies approximately 40% of the Site, located within Area 8 and the northern portion of Area 2 (Figure 2), and contains critical infrastructure that distributes natural gas to the New York City metropolitan area, particularly during periods of peak demand. It is vital that the LNG infrastructure at the Site remain in-service for gas distribution in the metropolitan area.

### *2.3.4. Onsite Spill Records*

Since 1990, a total of 29 on-Site spills have been reported to NYSDEC as shown on Table 1. All of these spills have subsequently been closed.

## 2.4. Surrounding Property Use

The surrounding land use is presented on Figure 4. Land use in the area surrounding the Site primarily consists of industrial and manufacturing facilities located to the north, south and west. Newtown Creek is located immediately adjacent to the east of the Site. To the east of the creek, land use is similar to that described above. Few residential or recreational use areas are located nearby.

Some of the potentially responsible parties (PRP) located in the immediate vicinity that may have impacted the Site are shown on Figure 6. Table 2 provides information on the individual PRPs. Some of these include:

- Lubraa Oil Corp./ Malmstrom & Co./ Atlantic Basin Oil Co./ Concord Oil Co./ Morania Oil Co./ Chevron Oil Co./ Calleia Brothers, Inc./ Gaseteria Oil Corp./ Valvoline Oil Co./ Gulf Oil Refining Co./ Ditmas Terminal/ BCF Oil Refinery – primarily located immediately south of the Site on Maspeth Avenue.
- Alfred Chemical Corp./ Chloral Chemical Corp – immediately north of the Site.
- United Crescent Dry Cleaning Corporation – adjacent to the northwest side of the Site.
- Acme Steel Corporation/ Acme Architectural Walls – immediately north of the Site.
- Jos. H. Lowenstein & Sons, Inc. – west of the Site.
- The Lignum Chemical Works – southwest of the Site.
- Cooper Tank Recycling Co. (part of the former Equity Works MGP [Equity] site) – south of the Site.

Numerous other PRPs were identified to date and they included manufacturing operations, sheet metal and chemical works, silk and fur dyeing operations, coal yards, lumber yards, a sewage pumping station, the Bureau of Highways yard, grit chamber, and pipe cutting and storage, truck filling and repair services, iron works, rope works/tar house, a glue factory, tannery, and printing and die cutting operations.

During the 19$^{th}$ and early 20$^{th}$ centuries, Newtown Creek was a petroleum process hub with over 50 operating refinery, processing, and canning facilities. Petroleum and solvents, potentially emanating from several of these facilities have been identified in on-Site groundwater. Some of these impacts are not related to historical Site operations.

As stated above, petroleum facilities including the BCF Oil Refinery (BCF), the Gulf Oil Refining Company, and the Ditmas Terminal, among others, were located immediately adjacent to the southern boundary of the Site across Maspeth Avenue. BCF has been the subject of multiple State environmental investigations and remedial activities, including the removal of more than 800,000 gallons of polychlorinated biphenyl (PCB)-contaminated oil and 65,000 pounds of scrap metal from the site by the USEPA in May 2000,

discussed further in Section 2.6.2. These petroleum facilities may be the source of petroleum-related impacts identified on-Site in adjoining areas along Maspeth Avenue, which is further discussed in Section 5.3. Several of the PRPs, particularly those to the south of the Site along Maspeth Avenue are likely also impacting Newtown Creek and/or English Kills.

Although not shown on Figure 6, PRPs located further north include the Meeker Avenue Plume Superfund Site and the ExxonMobil facility. Chlorinated solvent plumes including perchloroethene (PCE) and trichloroethene (TCE) were identified during the Meeker Avenue Plume Superfund site investigation along the perimeter of the GPEC Site to the north along Lombardy Street and the west along Porter Avenue, Division Place, and Vandervoort Avenue. Elevated concentrations of chlorinated volatile organic compounds (CVOCs) have been identified in groundwater in this portion of the Site and may be related to the Meeker Avenue Plume, which is further discussed in Sections 5.3 and 5.4. Reportedly, 17 million gallons of hydrocarbons spilled into the subsurface at locations to the northwest of the Site. This late 1940s spill has been identified as the Greenpoint Oil Spill. The responsible parties operate a groundwater treatment system at two locations along the Creek. As of the end of 2015, over 12,600,000 gallons of product had been recovered from recovery wells installed within the affected area. The contaminant plume from this spill likely overlaps the chlorinated solvent plumes discussed above. Further information on these investigations and others conducted in the vicinity of the Site is provided in Section 2.6.2.

## 2.5. Physical and Environmental Sampling

### *2.5.1. Regional Geology*

In the vicinity of the Site, the following stratigraphic units are documented in order of increasing depth:

- Fill
- Discontinuous sections of Alluvial/Marsh deposits
- Glacial outwash deposits consisting of discontinuous lenses of sand, silt and till
- Discontinuous sections of the Gardiners Clay (marine clay deposit)
- Discontinuous sections of the Jameco Gravel
- Bedrock

A detailed discussion of the geologic and hydrogeologic findings specific to the Site are presented in Section 4 of this report. Subsections 2.5.1 and 2.5.2 discuss the regional geology and hydrogeology so that the reader can gain an understanding of how the Site fits into the regional geologic framework. The following discussion of regional geology is presented in stratigraphic order from the deepest geologic unit (oldest) to the shallowest (youngest). Figure 7 depicts the generalized geologic sequence in the vicinity of the Site.

According to published information, the bedrock underlying the Site is Fordham Gneiss, which is described as a metamorphosed, medium- to coarse-grained rock unit of Precambrian Age (Brock, 2001).

Top of bedrock elevations within the vicinity of the Site are approximately El. –175 feet with a dip generally down to the southeast (Buxton, 1981).

Within Kings County, bedrock is generally overlain unconformably by unconsolidated late Cretaceous age deltaic deposits (Clay Member of the Raritan Formation), overlain by Pleistocene age channel fill (Jameco Gravel) and shallow marine deposits (Gardiners Clay), overlain by Upper Pleistocene (Wisconsin) age glacial deposits and Holocene age marsh/ alluvial deposits and artificial filling (Cartwright, 2002). In the vicinity of the Site, Jameco Gravel and glacial deposits lie unconformably upon bedrock.

The Jameco Gravel is described as a channel fill deposit associated with the ancestral Hudson River channel scour of southern Kings and Queens Counties. The unit consists of dark coarse sand and gravel with cobbles and boulders and ranges in thickness from absent at some locations to approximately 200 feet thick in Queens County (Cartwright, 2002). The northern extent of the unit is reportedly located approximately 1 mile south of the Site (United States Geological Survey [USGS] 1986). The approximate elevation of the surface of the Jameco Gravel, where present in the vicinity of the Site is El. -100 feet above msl (Buxton, Soren, Posner and Shernoff, 1981). The Jameco gravel has not been encountered at the Site.

The Gardiners Clay, which acts as a confining unit, overlies the Jameco Gravel where present, and is comprised of a greenish-gray clay and silt with some interbedded sand and gravel. The unit ranges from 0 to 150 feet thick with an approximate surface elevation of El. -40 to -200 feet above msl (Buxton and Shernoff, 1999). The Gardiners Clay is the principal confining unit in the region. The Site is at the northern extent of the Gardiners Clay (USGS, 1986).

The Upper Pleistocene deposits overlie the Jameco Gravel and Gardiners Clay deposits in the vicinity of the Site. Glacial deposits in the vicinity of the Site consist of terminal moraine and ground moraine deposits, which consist of poorly sorted mixtures of clay, silt, sand, gravel, and boulders, and glaciofluvial outwash deposits consisting of moderately to well-sorted sands and gravels and typically range in thickness between 100 and 200 feet (Cartwright, 2002). These deposits make up the Upper Glacial Aquifer (discussed below) and were present beneath the entire Site.

Holocene age marsh deposits overlying glaciofluvial outwash consist of sand, silt, organic material along stream channels and marshes, and have a maximum thickness of 50 feet within limited areas of Kings and Queens Counties (Busciolano, R., 2002). Marsh deposits were encountered discontinuously at the Site and range in thickness from 1 to 20 feet and range from organic silt and clay to fibrous peat-rich deposits known as “meadow mat.” These marsh deposits represent the natural ground surface prior to urban filling and development.

Urban fill is present around much of greater New York City including the Site and surrounding area. Fill at the Site generally ranges from about 15 to 25 feet thick, is generally placed atop the meadow mat marsh deposits, and is comprised mostly of poorly graded silt, sand, and gravel with various amounts of anthropogenic material (brick, glass, coal fragments, concrete fragments, wood fragments, etc.).

### *2.5.2. Regional Hydrogeology*

Three regional groundwater aquifers are present in the Long Island area in order of increasing depth:

- The Upper Glacial Aquifer consisting of Upper Pleistocene glacial deposits. Localized Holocene marsh and alluvial deposits (including clayey and silty deposits) are also grouped in the Upper Glacial Aquifer. These materials are typically less permeable than the underlying aquifers and may create locally confined conditions (Busciolano, 2002).
- The Magothy-Jameco Aquifer consisting of the Late Cretaceous Magothy Formation, Matawan Group deltaic deposits and Jameco Gravel deposits.
- The Lloyd Aquifer consisting of the Lloyd Sand Member.

Since the Lloyd Aquifer and the Magothy Aquifer do not extend northward and westward to the Site and its vicinity (Busciolano, R., Monti, J. Jr., Chu, A. 1998 and Busciolano, R., 2002), and the northern extent of the Jameco Aquifer is reportedly in the vicinity, but south of the Site, the discussion of the regional hydrogeologic units will focus on the Upper Glacial Aquifer and the confining units that bound it.

The Upper Glacial Aquifer is generally unconfined (water table); however, it can be locally confined by the presence of silt and clay layers within moraine deposits. Groundwater within the Upper Glacial Aquifer flows west to southwest towards the Upper New York Harbor. The horizontal hydraulic conductivity of glacial outwash deposits of the Upper Glacial Aquifer on Long Island was calculated at 270 feet per day (9.5 x 10-2 centimeters per second [cm/s]) (Cartwright, 2002) and is likely in the range of 135 feet per day (4.4 x 10-2 cm/s) in poorly-sorted moraine deposits (Cartwright, 2002). In the vicinity of the Site, groundwater flow in the Upper Glacial Aquifer is influenced somewhat by Newtown Creek and English Kills as a more localized discharge surface water feature. The Gardiners Clay underlies the Upper Glacial Aquifer and acts as a hydrologic confining unit where it is present (Cartwright, 2002). The average vertical hydraulic conductivity in the Gardiners Clay is approximately 0.001 feet per day (Busciolano, 2002).

### *2.5.3. Regional Water Use*

The public water supply is currently provided to the Site and surrounding area by the New York City Water Supply System. The water supply comes from a series of aqueducts from interconnected watershed areas, the Catskill/Delaware Watersheds and Croton Watershed, located 50 to 125 miles north of New York City. According to Cartwright (2002), the use of groundwater for public supply in Kings County was discontinued in 1947. Currently, groundwater flow to the west of the Site (downstream along Newtown Creek) is significantly affected by groundwater withdrawal systems associated with the Greenpoint Oil Spill being addressed by the responsible parties. The groundwater withdrawal systems have lowered the hydraulic heads in the northern and central portions of the Site, resulting in relatively flat groundwater gradients at the Site.

There are reportedly no public water supply wells within a 3-mile radius of the Site.

A well was installed at the recycling facility located at 222 Maspeth Avenue in 2003 to supply a dust suppression system along the perimeter of the property and to rinse mud and debris off vehicles before

leaving the facility. The use of the well for water supply for the dust suppression system and vehicle washing was discontinued in 2009.

A supply well is reportedly located to the southwest of the Site at a truck wash facility located at 184 Maspeth Avenue. No records were found for this well by NYSDEC or the New York City Department of Health. It is likely that the well is no longer active.

## 2.6. Previous Investigations and IRMs

### *2.6.1. On-Site*

A limited number of environmental investigations have been performed at the Site prior to the RI and were largely limited in area and scope. The first recorded environmental investigation was in 1979. Prior to that year the investigations were geotechnical in nature and intended to support the facility construction. Below is a summary of the environmental Site investigation reports which were available for review. Additional information is provided in Appendix J.

#### Brooklyn Union Gas Naphtha Study Boring Results, Brooklyn Union Gas Company, February 1979

Starting in January 1979, BUG, at the request of the United States Coast Guard (USCG), drilled soil borings in the Naphtha Tank Farm Area in the north-west part of the Site. These borings assisted the USCG in defining the extent of a possible underlying hydrocarbon release located in the Greenpoint area of Brooklyn. The study was prompted by the USCG observation of large quantities of oil, later determined to consist of a blend of petroleum-related liquids, in Newtown Creek on September 2, 1978. The investigation determined that 17 million gallons of petroleum-related liquids (generally referred to as “oil”) had been released into the subsurface at locations to the northwest of the Site.

A total of 17 borings were drilled at the Naphtha Tank Farm Area. No contaminants were found in either the water or the soil samples taken from the available test points in the Naphtha Tank Farm Area. The samples were examined by both BUG and the USCG. The boring locations are shown in Plate 2.

#### Investigation of Underground Accumulation of Hydrocarbons along Newtown Creek, Brooklyn, New York, Geraghty and Miller, Inc., July 1979

The report summarizes the results of a study carried out by Geraghty and Miller (G&M) on behalf of the USCG which investigated a large accumulation of hydrocarbons in the subsurface of Brooklyn, New York. The hydrocarbons were detected throughout the Greenpoint area of Brooklyn as early as the 1950s. Based on information available in the subject report as well as on the NYSDEC website dedicated to the spill (http://nysdecgreenpoint.com/), approximately 17 million gallons of hydrocarbons were reportedly spilled into the subsurface in what became known as the Greenpoint Oil Spill. The investigation began in September 1978 and continued until June 1979. The horizontal and vertical extent of the petroleum product was mapped through installation of test borings and collection of field measurements. The Site was part of the area under investigation. The expected sources of the hydrocarbon accumulation were thought to be oil terminals and pipelines which are present throughout the area.

A total of six borings were installed around the tank farm in the north-west part of the Site and one additional boring along Lombardy Street at the foot of Stewart Avenue to a depth of up to 53 feet below ground surface (bgs). According to the report, no traces of hydrocarbons were found in any of the soil or water samples collected from the wells installed at the Site. Based on these results, G&M concluded that the spill originated at the properties owned or formerly owned by Mobil and not at the GPEC Site. The boring locations are shown in Plate 2. The remedial program is currently being addressed by the responsible parties which include Exxon/Mobil, Chevron/Texaco and BP and is now known as the Greenpoint Petroleum Remediation Project.

## Ground-Water Contingency Plan for the Brooklyn Union Gas Company Petroleum Bulk Storage Facility, Roux Associates, 1990

Roux Associates was retained by BUG in June 1989 to install and sample five groundwater monitoring wells at the petroleum bulk storage facility in the north-west part of the Site. The purpose of the monitoring wells was to evaluate groundwater quality, to determine if any petroleum hydrocarbons were present near above-ground storage tanks (ASTs), and to monitor for future leaks at the Site.

The five wells were initially sampled in July 1989 and then re-sampled during January 1990 and May 1990. During the July 1989 sampling event, the five wells were sampled for benzene, toluene, ethylbenzene and xylene (BTEX) and petroleum products (i.e., gasoline, kerosene, and fuel oil). During the January sampling event, the five monitoring wells were sampled for BTEX, gasoline, kerosene, fuel oil, and lubrication oil. During the May sampling event, the five monitoring wells were sampled for BTEX and for polycyclic aromatic hydrocarbons (PAHs). No above-mentioned constituents were detected during the three sampling events. No free product had been found in the five monitoring wells when measurements were taken by Roux Associates' personnel or during monitoring of the wells for free product by BUG personnel. The boring locations are shown in Plate 2.

## Underground Storage Tank Closure Report, Lexicon Environmental Associates, 1993

In July 1993, Lexicon Environmental Associates observed the removal of two 4,000- and two 550-gallon tanks located at the south-west side of the Transportation Building. The 550-gallon tanks were in service from 1959 to 1988 and were only used for gasoline storage. The 4,000-gallon tanks were in service from 1977 to 1993 and were also only used for gasoline storage. The excavation outside of the concrete vaults that housed the 550-gallon tanks exposed contaminated soils that exhibited an odor not characteristic of gasoline-contaminated soils. Five soil samples were collected following the tank removal from depths of between 3 to 45.5 feet bgs, and one soil sample exhibiting the highest field volatile organic compound (VOC) reading was additionally submitted for characterization and identification of potential contaminant sources. All five samples identified the presence of several VOCs in varying quantities. Naphthalene was identified at concentration of 20,000 microgram per kilogram (µg/kg) in one of the soil samples. A petroleum hydrocarbon analysis obtained from one of the tank pit soil samples did not match gasoline, fuel oil, or diesel fuel reference standard patterns. The peaks identified in the analysis were heavy molecular weight hydrocarbons. The boring locations are shown in Plate 2**.**

## Underground Storage Tank Groundwater Investigation, Fanning, Phillips & Molnar, 1993-1995

Fanning, Phillips & Molnar (FP&M) were retained by BUG to perform an underground storage tank (UST) groundwater investigation following the removal of four USTs located at the south-west side of the Transportation Building in July of 1993. The investigation findings noted:

- USTs tested tight, tank steel in excellent condition
- Regarding the condition of the 550-gallon tank concrete vaults: clean sand backfill, no gasoline contamination evident
- Regarding the condition of the concrete encasing of the 4,000-gallon tanks: no staining
- Soil samples exhibited naphthalene levels not indicative of gasoline.

The NYSDEC required BUG to install groundwater monitoring wells at the southwest UST area based on the levels of hydrocarbons present in soils. Four wells were installed following this request in 1993 and 1994. Free product, which was identified as light non-aqueous phase liquid (LNAPL) was encountered in monitoring wells W-1 and W-2 (noted on Plate 2 as 16-GPEC-W-1 and 16-GPEC-W-2) one week after development. During drilling of monitoring wells W-3 and W-4, petroleum-contaminated soils were encountered at the water table. Free product was not detected in wells W-3 or W-4 during this investigation but was detected during the BCF RI.

The closest previously existing monitoring well to the tank excavation was GPW-7, located 365 feet west of the UST area, which was installed in 1987. The drilling log for the well indicates that soil samples obtained from the vadose zone, water table, and the saturated zone exhibited a weathered gasoline odor and the cuttings had a slight sheen. The depth to water was approximately 7 feet bgs. The groundwater sample at GPW-7 had 1,800 milligrams per liter (mg/L) of benzene present. The boring locations are shown in Plate 2.

## Investigation of Proposed UST Locations East of Transportation Building, Groundwater Technology, Inc., 1995

Groundwater Technology, Inc. (GTI) installed five geotechnical borings and a monitoring well at the request of BUG to support the replacement of the existing USTs at the east side of the Transportation Building. Soil samples were collected during the boring installation at 5 to 7 and 10 to 12 feet bgs intervals. A monitoring well was completed to a depth of 20 feet and a groundwater sample was collected following the well installation.

The soils encountered in the bore holes and monitoring well consisted of fill deposits. The water table was located at approximately 11 feet bgs. Soil samples indicated elevated concentrations of benzene, xylene, 1,2,4, trimethylbenzene, and naphthalene. The groundwater sample only had elevated benzene and none of the other abovementioned compounds.

A memorandum related to the boring installation indicates observation of elevated VOC field readings in soil below the water table starting at 15 feet bgs. The highest VOC field reading of 600 milligram per kilogram (mg/Kg) was observed at 27 feet bgs. The memorandum describes soil at that depth as

"saturated with a black liquid" and having a visible sheen. The VOC levels reduced at 32 feet bgs, where a clay layer was encountered. The boring locations are shown in Plate 2.

## Preliminary Evaluation of Maspeth Holder Demolition Impacts, Vanasse Hangen Brustlin, Inc., 2001

At the request by KeySpan Energy (predecessor to National Grid, and the owner of the GPEC at the time) Vanasse Hangen Brustlin (VHB) performed a preliminary evaluation of KeySpan's analytical data collected prior, during and after the demolition of the Maspeth Holders which were demolished by implosion on July 15, 2001. Surface soil samples were collected prior to and after the demolition of Holders 1 and 2 from a depth interval 0 to 1.5 centimeters (cm) bgs from 76 locations near the holders, including areas outside the Site. All soil samples were analyzed for lead addressing a concern of elevated lead concentrations which could have originated from paint chips flaking from the Maspeth Holders. Surface wipe samples were collected from a variety of hard surfaces and also analyzed for lead. The surface soil sampling locations are shown in Plate 2.

Lead concentrations in surface soils ranged from 1 mg/Kg to 2,600 mg/Kg. The highest lead concentration of 2,600 mg/Kg registered in a surface soil sample collected outside the Site a few days before the Maspeth Holders implosion. The overall average lead concentration for surface soil samples collected pre-demolition was 339 mg/Kg while the post-demolition overall average concentration was 322 mg/Kg. VHB concluded that the pre- and post-demolition lead concentrations in soil were not statistically significantly different.

## Greenpoint Holder Soil Sampling Results, Miller Environmental Group, 2002

A soil sampling program was carried out by Miller Environmental Group in November 2002 in the vicinity of the Maspeth Holder Station Holders 1 and 2. Soil samples were collected from 27 locations to a depth of 1 feet bgs and analyzed by KeySpan Laboratory Services for lead. No formal report was found, but according to the available lab analytical reports, lead concentrations ranged from 35 mg/Kg to 12,100 mg/Kg. The sample with highest lead concentration was collected from the ground surface. No map of sampling locations was provided.

## Preliminary Subsurface Investigation at the Greenpoint Operations Center, Miller Environmental Group, 2003

Miller Environmental Group was retained by KeySpan Energy Corporation to perform a preliminary subsurface investigation at the Site in December 2002. Three borings and one temporary well were installed in the vicinity of LNG Tank 2 to a maximum depth of 13 feet bgs. Three soil and two groundwater samples were analyzed for Resource Conservation and Recovery Act (RCRA) metals, VOCs, semi-volatile organic compounds (SVOCs), cyanide, and diesel range organic compounds (DRO). Soil was also analyzed for petroleum products, and dielectric compounds. An Oil/NAPL sample was recovered and identified by the lab as a #6 fuel oil. The sampling locations are shown in Plate 2. According to the Miller Environmental Group, the investigation indicated residual MGP waste at each sampling location both by field observations and analytical results.

## Northeast Corner of the Greenpoint Energy Center (Liquefaction Plant), Paulus Sokolowski & Sartor Engineering, PC, 2004-2007

Site investigation activities were conducted by the Paulus Sokolowski & Sartor (PS&S) Engineering Company from 2004 to 2007 at the request of National Grid in the area of the proposed LNG liquefaction facility in the north-east part of the Site. The investigation activities were intended to support a RI of the area and an IRM design and implementation. Investigation activities included the installation of 58 soil borings, multiple test pits, SV monitoring points, groundwater monitoring wells and the collection and laboratory analysis of soil, SV, and groundwater samples. Soil samples were analyzed for VOCs, SVOCs, PCBs, and RCRA metals and cyanide. The sampling locations are shown in Plate 2. A summary of the observations based on the available PS&S reports is presented below:

- Within the investigation area underlying the proposed LNG liquefaction facility, areas of subsurface soil exhibiting tar fragments, saturation, staining or coating, were encountered primarily in the first 5 feet bgs. Visual impacts were observed to a maximum depth of 18 feet bgs.
- The highest VOCs and SVOCs concentrations were observed in the subsurface soil samples collected from 0 to 6 inches above the groundwater table. VOC and SVOC concentrations decrease below a depth of 5 feet bgs.
- Metals concentrations above the applicable standards were limited to arsenic and mercury.
- PCBs detections were limited to two samples out of a total of 69 samples. All of the samples were below the Industrial Use Soil Cleanup Objectives (IUSCOs) and only one sample of the 69 total samples collected was above the Unrestricted Use Soil Cleanup Objectives (UUSCOs).
- Naphthalene odors were detected to a maximum depth of 3 feet bgs while fuel-like odors were detected to a maximum depth of 45 feet bgs.

An IRM was subsequently implemented under the approval of the NYSDEC addressing the impacted soil prior to the construction of the liquefaction facility as discussed below.

## Northeast Corner IRM PS&S (2005)

An IRM was conducted in 2005 within the Northeast Corner of the Site in advance of ground-intrusive construction activities planned for the area (Figure 8). The IRM was conducted in order to eliminate exposure pathways to Site soils with contaminant concentrations in excess of established cleanup standards and to remove grossly contaminated soils and other potential contaminated material that could serve as a potential source of contaminant soil gas.

IRM activities were completed between April and June 2005 and included the excavation and disposal of approximately 10,300 tons of non-hazardous impacted soil and associated debris. Excavation depths reached a maximum depth of 13 feet bgs. The work area was restored upon completion.

A copy of the IRM completion report is included in Appendix J.

## Northeast Corner Supplemental IRM, PS&S (2006-2007)

Supplemental IRM activities were conducted in advance of additional ground-intrusive construction activities. The objective of the Supplemental IRM activities was to remove impacted soils to eliminate future potential direct contact and inhalation exposure pathways to workers performing subsurface construction activities associated with the expansion of the facilities operations within the area.

IRM activities commenced in July 2006 and concluded in December 2007. The Supplemental IRM activities included excavation and disposal of approximately 7,100 tons of impacted soil and associated debris. Excavation depths ranged from 3 to 10 feet bgs. Five drywells were installed as part of the project. The work area (Figure 8) was restored upon completion.

A copy of the IRM completion report is included in Appendix J.

## Ball Field Human Health Risk Assessment Program, GEI Consultants, Inc., June 2010

GEI conducted an assessment of human health risk in December 2010 for the former Site baseball field located at the intersection of Maspeth and Vandervoort Avenues. A separate public ballfield is also present in Area 9 of the site at the intersection of Division Place and Vandervoort Avenue. The Human Health Risk Assessment (HHRA) was conducted for the former Site ballfield in response to the results of the evaluation of soil samples collected adjacent to the ball field by Miller Environmental Group in April 2010 which identified the presence of chemicals of potential concern. Prior to the start of this assessment, the baseball field was used by National Grid employees for a summer baseball league. In addition, the baseball field had been leased by Saint Joseph's College for their women's softball team practices and home games during the fall and spring seasons.

GEI evaluated the potential exposure of receptor populations to surface soils and soils immediately beneath the baseball field. Sample locations are presented in Plate 2. Based on the evaluation of potential exposures to the human receptors at the baseball field, the cancer risk estimates for a child visitor, adult worker and student player at the baseball field are within the USEPA acceptable cancer risk range of $1x10^{-4}$ to $1x10^{-6}$. However, to be conservative, National Grid subsequently suspended use of the ball field.

## Pre-Design Investigation Program, GEI Consultants, Inc., 2009-2010

GEI conducted a PDI to assess the need for a Loading Platform area IRM in accordance with a NYSDEC-approved PDI Work Plan, Cutoff Wall Interim Remedial Measure dated January 9, 2009, and Supplemental PDI Work Plan, Cutoff Wall Interim Remedial Measure dated April 8, 2010. The NYSDEC agreed with GEI's PDI findings in a letter dated October 8, 2014, that an IRM containment barrier was not warranted at this time because the investigation demonstrated that there were no subsurface NAPL migration pathways from the Site to Newtown Creek sediment. Data from these investigations have been incorporated into this report.

### Maspeth Regulator Station Remedial Excavation, National Grid 2012

The Maspeth Regulator Station was investigated as part of Phase 1 of the RI. The investigation results were used to evaluate the potential need for remediation at the proposed Maspeth Regulator Station. The findings of the investigation have been incorporated into this report.

A total of 5,144 tons of soil were excavated and disposed of off-Site as part of the project to facilitate construction. Disposal manifests are included as Appendix K. Excavation depths ranged from 3 to 12 feet bgs. The excavation areas are shown on Figure 8.

## *2.6.2. Adjacent Off-Site*

### Newtown Creek/Greenpoint Oil Spill Study, U.S. Environmental Protection Agency, 2007

The Newtown Creek oil spill was discovered in September 1978 by a USGS routine patrol (Geraghty and Miller, 1979). The report notes that hydrocarbon accumulations were detected throughout the Greenpoint area of Brooklyn as early as the 1950s. Oil accumulation was observed in Newtown Creek that on further investigation was found to be seeping from a bulkhead at the foot of Meeker Avenue. G&M completed the initial investigation of the oil spill extent on land in 1979 at the request of the USCG and produced the first map of the spill extent (Geraghty and Miller, 1979). According to their estimates, most of the product accumulation occurred under the Exxon Mobil facility with the oil plume limit extending to within one block of the northern border of the Site. G&M indicated that the minimum spill volume was about 17 million gallons. Product recovery estimates and the present free-product extent suggest that the 1979 estimate may have been somewhat low. Smaller additional spills have occurred after the discovery of the Meeker Avenue seep and have been documented in various reports (USEPA, 2007).

Over 20 additional investigative studies were completed by 2007 and numerous work plans, progress reports, and information packages were issued since 1979 in the area of the spill (USEPA, 2007). Approximately 35 product and groundwater recovery wells and over 200 monitoring, or observation wells were installed since 1978. Parties to the investigations have included major petroleum companies that have operated terminals or other facilities in the area for many decades, both before and after the spill discovery. Soil and groundwater sampling and analysis determined that BUG was not a PRP for the oil spill (Geraghty and Miller, 1979). Locations of the soil borings at the Site from the 1979 study are presented in Plate 2.

At present, the extent of the free-product petroleum plume is divided into four specific areas of responsibility: (1) the “on-site” area which includes the Exxon Mobil properties that overlie the northern portion of the plume, (2) the BP Amoco terminal that borders Newtown Creek to the southeast of the Exxon Mobil facility, (3) the “off-site” area which includes commercial and residential areas in the central and southern portion of the plume for which Exxon Mobil has taken remedial responsibility, and (4) the former Paragon Oil Property (now Peerless Importers and Steel Equities facilities) bordering Newtown Creek, now being remediated by Chevron Texaco. Close to 13,000,000 gallons of oil have been

recovered to-date. Remediation efforts by the abovementioned parties are on-going (http://nysdecgreenpoint.com).

## Meeker Avenue Plume

The Meeker Avenue Plume Site (NYSDEC Site No. 2-24-121 and USEPA NPL ID NYN00203407) is located in the residential area of the Greenpoint/East Williamsburg Industrial Area section of the Borough of Brooklyn, New York, to the northwest of the Site. The Meeker Avenue Plume Superfund Site was added to the USEPA National Priorities List as of March 2022. The investigation area is located in a region of historical petroleum refining and storage.

Based on results of several investigations that URS Corporation (URS) conducted in the area, chlorinated solvents such as PCE and TCE were found in SV, soil, and ground water in the areas outside the Exxon Mobil petroleum spill. As these chemicals are not related to petroleum, NYSDEC initiated an investigation to determine the source(s) of this contamination. The investigation area closest to the Site is the residential area located south of the Brooklyn-Queens Expressway and is the area of the soil-vapor intrusion investigation.

To the south of Meeker Avenue, SV samples indicate potential sources of PCE and TCE as follows: near a former and current metal working facility on the east end of Vandervoort Avenue between Anthony and Lombardy Streets (1,100 microgram per cubic meter [µg/$m^3$] PCE, 1,00 µg/$m^3$ TCE), near a former dry cleaner in the block bound by Richardson and Frost Streets between Morgan and Vandervoort Avenues (310,000 µg/$m^3$ PCE, 19,000 µg/$m^3$ TCE), and near a former dry cleaner in the block bound by Beadel Street and Division Place between Morgan and Vandervoort Avenues (13,000 µg/$m^3$ PCE, 370 µg/$m^3$ TCE). A potential source of 1,1,1-trichloroethane (1,1,1-TCA, 6,600 µg/$m^3$) and 1,1–dichloroethane (1,1-DCA, 2,000 µg/$m^3$) was also identified near a former drum storage area and current metal recycling facility on the east side of Vandervoort Avenue between Lombardy and Beadel Streets (URS, June 2008).

URS completed a residential air sampling effort to further assess SVI in the Greenpoint/East Williamsburg Industrial Area neighborhood in February through March 2008. The investigation area was located immediately north-west of the Site and was bounded by Lombardy Street and Division Place between Morgan Avenue and Porter Avenue. Twelve residential properties were investigated for vapor intrusion. PCE concentrations in the SS samples ranged from 51 µg/$m^3$ to 70,000 µg/$m^3$, TCE concentrations in the SS samples ranged from 1.2 µg/$m^3$ to 3,300 µg/$m^3$; 1,1,1-TCA concentrations in the sub-lab samples ranged from 2.6 µg/$m^3$ to 580 µg/$m^3$. Freons (i.e., 1,1,2-tricloro-1,2,2-trifluoroethane, dichlorodifluoromethane, and trichlorofluoromethane) in the SS samples were detected at concentrations ranging from not detected to 18,000 µg/$m^3$.

The analytical results were compared to the ingredients in the household product inventories. URS concluded that the presence of the household products did not appear to contribute to the presence of chlorinate compounds of interest in the indoor air (IA) samples.

Additionally, the NYSDEC has completed additional investigations of approximately 170 commercial and residential structures within the Meeker Avenue Plume area.

A figure showing the extent of the Meeker Ave PCE and TCE Plume is shown in the Executive Summary of this report and is also provided in Appendix J, Historical Investigations.

## BCF Oil Refining Site, Multiple Investigations & Emergency PCB Removal Action, 1992-2009

BCF is located at 360-362 Maspeth Avenue on English Kills in Brooklyn, New York across the street from the Site. The site is a 1.9-acre former petroleum distribution and oil recycling facility. The facility refined used oil and "tank bottoms" for use in boilers and other energy recovery applications.

A number of site investigations were conducted from 1992 through 2009. These investigations included the RI, which was largely focused on PCBs, as well as a Demonstration of Method Applicability Study (Malcolm Pirnie 2008) and other investigations conducted by Unico Environmental (1992), Environics (1992), Rust Environmental & Infrastructure (1998), TRC (2005), and TetraTech (2008).

The results of the investigations indicated VOCs, SVOCs, metals, and PAHs were present in on-site soils above regulatory guidelines. PCB contamination in soils was also identified. VOCs, metals, and measurable thicknesses of LNAPL were identified in groundwater. PCBs and SVOCs were detected to a limited extent in groundwater. PCBs were also detected in shoreline sediments and porewater.

Sheen was observed on Newtown Creek near the BCF. Beginning in May 2000, USEPA conducted an emergency response action related to PCBs at BCF to address concerns about possible leakage from abandoned USTs, ASTs, and drums. The emergency response action removed more than 800,000 gallons of PCB-contaminated oil and 65,000 pounds of scrap metal from the BCF Oil Site. To the best of our knowledge the BCF Oil Site was not a toxic substances control act (TSCA)-permitted facility. In August 1994, NYSDEC approved an emergency authorization to discharge wastewater potentially containing oil, BTEX and PCBs from the site to English Kills bypassing the oil-water separator. Multiple other releases of waste and used oil to English Kills surface water are recorded in the NYSDEC Spill Incidents Database (Draft Upland Site Summary, Anchor QEA, 2012). As of July 13, 2000, the property has been listed an active Superfund site (EPA ID-NYD068273044).

## Former Gulf Oil Terminal (Former Terminyx Corp. and Former Ditmas Oli Assoc. Inc) 2004–2012

The former Gulf Oil Terminal (Gulf) site is located at 364 Maspeth Avenue on English Kills in Brooklyn, New York across the street from the Site. The site is a 7-acre former petroleum bulk storage facility and was also historically used as part of a glue factory.

The Gulf site was an independent petroleum products storage and distribution bulk terminal. The site received various petroleum products from barges in the adjacent waterway and the Buckeye pipeline that ran through the Site. Fuel was stored in above and below ground storage tanks and then pumped into trucks through an underground piping system. Gasoline was the main product stored at the facility, although kerosene, diesel, and No. 2 Fuel Oil could also be found in smaller tanks. Numerous petroleum spills have been reported at the site. The site was decommissioned between February 2004 and June 2005. Approximately twenty petroleum storage tanks were removed from service. (A 2,000-gallon

fuel-oil UST remained for heating the on-site office building.) All tanks and underground piping were drained of their content, demolished and removed from the site.

There are two documented spills from the site. One was a surface spill into secondary containment in 1990 that reportedly reached the English Kills (Spill Number 9006603), and the second was a spill from an underground pipeline in 1999 (Spill Number 9812647). The NYSDEC file for Spill Number 9006603 remains open.

Groundwater investigation work at this site dates back at least to December 2004 when trenching and recovery of LNAPL and water was initiated. The remedial history (through 2012) includes the following:

- 15,000 gallons of a mixture of groundwater and LNAPL removed from test pits in 12/2004.
- Bio-remediation system installed in June 2005, monthly applications of Bio Rem™ applications reduced in amount and frequency in March 2008.
- Beginning October 2006 LNAPL was bailed monthly from four wells with a total of 79.85 gallons of LNAPL removed through March of 2010.
- Vacuum extraction using a vacuum truck began in the central area of the site in March 2010. This area is approximately 300 feet from English Kills and 900 feet from Newtown Creek. Two vacuum removal events (July and October) recovered 421 gallons LNAPL and 5,715 gallons of contaminated water.

The most recent groundwater monitoring data (2011) show the LNAPL restricted to two areas in the central and southern portion of the site. According to a February 14, 2012, Remedial Action Work Plan Addendum (RAWP) by CEUS Engineering, LNAPL gauging continues on a monthly basis. Significant recommendations in the RAWP included a RAWP for the recovery of product in the central area of the site, potential pilot testing a revised bio-remedial approach to bioremediation for the central site LNAPL area, and a delineation study in the vicinity of the southern LNAPL area and a new monitoring well to be located downgradient of the area.

## Newtown Creek Remedial Investigation, Laurel Hill Site, Maspeth, New York, Anchor Environmental, L.L.C., 2007

The Laurel Hill site is located across Newtown Creek, directly opposite the GPEC. Anchor Environmental, L.L.C. (Anchor) implemented RIs both on land and in Newtown Creek adjacent to the Laurel Hill site at the request of Phelps Dodge Refining Corporation. Historically, industrial operations at the Laurel Hill facility included production of sulfuric acid, muriatic, nitric, and other acids; refining of blister copper; smelting ore concentrates and copper and brass scrap; silver and nickel refining and tin production. It is noted that a Bessemer Plant was also identified on the property on a Sanborn Fire Insurance Map (Volume 3, Borough of Queens) subsequent to the Anchor report. Bessemer Plants are known to share the characteristics of a MGP. All furnaces were fired by coal until the 1920s when the furnaces were switched to oil stored in two aboveground oil storage tanks. A 1955 plan of the Laurel Hill Facility Uplands indicates a discharge line from the smelting blast furnace into a “slag pond,” which eventually discharged into Newtown Creek via an underground sewer pipe. Smelting operations discontinued around 1960. In 1983 copper operations closed at the Laurel Hill Facility.

Remediation efforts at the facility began in 1987 under NYSDEC supervision. During the uplands RI efforts, more than 100 boreholes and 38 monitoring wells were installed to characterize the geology and hydrogeology and to investigate soil and groundwater contamination (Draft Remedial Investigation Report Operable Unit 6 Laurel Hill Site, Anchor, 2007). The RI results indicated the presence of primarily heavy metals in the fill soils at concentrations exceeding the NYSDEC Technical and Administrative Guidance Memorandum 4046 recommended soil cleanup objectives. Metals concentrations in groundwater were found to exceed the NYSDEC Class GA groundwater standards. PCBs were found at concentrations exceeding applicable NYSDEC cleanup criteria in soils and concrete in some areas of the Laurel Hill Facility Uplands (Anchor, 2007). PCBs were also identified in electrical equipment, smokestacks and electrolytic tank house areas in Operable Unit (OU)-1A and within samples taken of standing water within OU-4 and OU-5. PCB removal actions were conducted in 2000 and PCB and petroleum contaminated hot spot soil removal was performed in 2004. The maximum concentration of total PCBs detected in uplands soils prior to remediation was 36,000 mg/Kg. (PDRC Former Laurel Hill Draft Upland Summary Report, Phelps Dodge Refining Corp. May 2012).

Remediation at the facility started in 2003 and involved removal of PCB, mercury and petroleum-contaminated soils; capping in some areas and groundwater containment consisting of a steel sheet pile barrier wall installed to a depth of 20 to 25 feet and groundwater collection and treatment system. Approximately 5,200 tons of PCBs contaminated waste were disposed of off-site during site decommissioning; however, PCB-contaminated and petroleum-contaminated soil (up to 10 parts per million [ppm]) were allowed to remain on-site as per NYSDEC's 2003 Record of Decision.

Anchor Environmental performed a supplemental RI from 2004 through 2005 which addressed Operable Unit 6 (OU-6), defined as a portion of the site that abuts the Laurel Hill Facility Uplands and includes submerged areas of Newtown and Maspeth Creeks. Sediment, surface water, and porewater samples were collected during the investigation. Throughout OU-6 (Newtown Creek and English Kills), a wide range of contaminants have been detected in surface sediments including metals, PCBs, PAHs, SVOCs, VOCs, pesticides, and dioxins exceeding Effects-Range-Median Screening Level (ERM) criteria. Anchor identified that the area within the creek adjacent to the GPEC Site is a sediment depositional zone for impacted sediments from the Laurel Hill site (Anchor, 2007). Furthermore, PCBs detected during the Uplands investigation on the Laurel Hill site were similar in composition to those detected in the sediments adjacent to the GPEC Site.

A subset of sediment samples collected in Newtown Creek was submitted for PAH, PCB, and hydrocarbon characterization (Anchor, 2007). The results of the "parent+alkylated" PAH analysis identified four distinct sources or mixtures of PAH in Newtown Creek sediments. Two locations of the sediment samples submitted for PAH forensic analysis were less than 100 feet away from the Site bulkhead, the other three sample locations were positioned both upstream and downstream of the Site extending to the Brooklyn Queens Expressway. Surface sediment samples were collected at all five locations at depth interval from 0 to 10 cm below mud line or 0 to 14 cm below mud line and subsurface sediment forensic samples were collected at two locations to depths of up to 300 cm below mud line. Results of the hydrocarbon characterization were in part summarized as follows, "it is unlikely that much of the surface sediment (0 to 10 cm below mud line) PAHs measured near the Laurel Hill Site, across the Creek, or downstream have a significant contribution from either the tar source or the very high temperature pyrogenic PAH

sourcing. Rather, their PAH distributions are more consistent with input from weathered petroleum sources" (Anchor, 2007).

## Former Equity Works Manufactured Gas Plant Site

Prior to conducting an RI at the property, several other investigations were conducted on the properties comprising the Former Equity Works MGP Site (Equity) located at 222 and 252-254 Maspeth Avenue in Brooklyn, New York. Details of these investigations are provided below, followed by details of the RI and subsequent investigations and remedial actions.

## 252 Maspeth Avenue Property

A Phase II Environmental Subsurface Investigation (ESI) for the 252 Maspeth Avenue Property was conducted in March 2005 by Gannett Fleming Engineers, P.C. (GFE) on behalf of Cooper Tank and Welding Corp. (Cooper Tank), who was the potential lessee of the property (GFE, 2005). GFE installed four soil borings on the property and collected soil samples which were analyzed for VOCs, SVOCs, PCBs, and 13 Priority Pollutant Metals plus barium. Temporary groundwater monitoring wells were installed in two of the borings, and groundwater samples were collected and analyzed for the same constituents as the soil samples. In soils, VOCs, SVOCs, and various metals were detected in samples from all four borings. PCBs were detected in the four soil samples collected with a maximum concentration of 2.6 mg/Kg. PCBs are not associated with MGPs and are interpreted to be related to the presence of urban fill emplaced following cessation of MGP operations. Odors and staining were observed in all four borings. In ground water, VOCs, SVOCs and various metals were detected in samples collected from both temporary wells. PCBs were detected in one groundwater grab sample with a concentration of 2 µg/L, but the detection is likely turbidity related given the relative insolubility of PCBs in water.

## 254 Maspeth Avenue Property

A Phase II ESI was conducted for the 254 Maspeth Avenue Property in September 2004 by Energy and Environmental Analysts Inc. (EEA) on behalf of Spencer Realty Corporation (the property owner) and Cooper Tank (the potential property buyer) (EEA, 2004). EEA installed six soil borings on the property and collected soil samples which were analyzed for VOCs, SVOCs, and RCRA metals. SVOCs and various metals were detected in all six borings. VOCs were detected in two of the borings. The subsurface geology was characterized to the completion depth of the borings.

A Phase I Environmental Site Assessment was conducted for the 254 Maspeth Avenue Property in October 2004 by GFE on behalf of Cooper Tank, who was the potential buyer of the property (GFE, 2004). GFE conducted a records search, interviews, and site visit. Surficial soil staining was observed on site. A Phase II investigation of potential soil and groundwater impacts was recommended.

## 222 and 252-254 Maspeth Avenue Properties

GFE performed geotechnical investigation work on behalf of Cooper Tank in September 2006 (GFE, 2006), consisting of five borings. The boring locations are shown in Plate 2; the available information for this investigation is provided in Appendix J.

On behalf of National Grid, AECOM completed an RI at Equity and submitted the final RI report to NYSDEC in August 2016. Following the completion of the RI, an IRM consisting of the installation of a NAPL recovery well network was completed within and along the perimeter of 222, 252 and 254 Maspeth Avenue properties. Approximately 22,300 gallons of mixed fluids, of which 60 to 75% (~13,400 gallons) are estimated to be NAPL, have been collected from the system over the 5-year period between July 2014 and July 2019.

A Supplemental Investigation (SI) and PDI were completed at the 222 Maspeth Avenue parcel in August 2018 and June 2019 and the findings subsequently submitted to NYSDEC. The SI activities provided additional information in proximity to the former No. 1 relief holder area on the 222 Maspeth Avenue parcel that was not previously fully accessible during the RI due to former site operations. The PDI was performed to further evaluate subsurface conditions at the 222 Maspeth Avenue parcel within and adjacent to former MGP structures to support an IRM currently under design.

The proposed IRM is expected to consist of the following:

- A combined excavation/in-situ stabilization (ISS) remediation of impacted areas within the 222 Maspeth Avenue parcel. Specifically, the IRM is anticipated to be comprised of excavation of the Relief Holder 1 contents to the extent practicable; and
- Removal of former structures to the east and southeast of Relief Holder 1, i.e., settling tank, tar tank and drip tanks; and ISS of soils surrounding the Relief Holder and outlying areas on the parcel to the depth of the intermediate clay.

A summary of the RI/SI/PDI findings is presented below. RI sample locations are shown on Plate 2.

NAPL impacts are largely confined to the site and do not extend beyond Rewe Street to the south in the direction of the nearest water body, English Kills (Remedial Investigation Report – Final, AECOM 2016). No pathways for NAPL migration from the GPEC Site to the Equity site or from the Equity site to English Kills were identified during the RI. NAPL presence was observed to be aligned with the topography of the various lower permeability units, which largely limited its potential to migrate from the site to adjacent properties. The pending IRM work at the 222 Maspeth Avenue parcel will permanently remove/remediate subsurface impacts to the intermediate clay layer beneath that portion of the Site. Deeper NAPL impacts beneath the intermediate clay unit below former Relief Holder No. 1 will be managed with additional recovery wells anticipated to be installed following completion of the IRM.

The horizontal extent of BTEX and PAH impacts in soil was delineated excluding an area on the 300 Maspeth Avenue property where USTs were formerly located, and to the north, onto the GPEC Site. PCBs were detected in surface and subsurface soil samples above the UUSCOs but below the IUSCOs. The PCB detections are believed to be related to the fill placed following cessation of MGP operations.

Dissolved phase impacts in shallow zone (water table) wells are largely isolated to the former site boundary. Constituent concentrations in the intermediate and deep portions of the overburden aquifer

are generally present in same areas but are higher within the intermediate zone. Non-MGP related constituents such as CVOCs are also present in groundwater beneath the RI Study Area.

# 3. PDI and Remedial Investigation Scope and Methods

## 3.1. Historical Data/Records Review

GEI gathered and reviewed sources of background/historical information listed below to help focus the RI and understand potential areas of concern to be addressed.

- Prior environmental studies/reports
- Local agency files
- State and federal environmental databases
- Interviews with past/present property owners/operators
- Interviews with representatives of GPEC
- Historical aerial photographs
- Site plans and construction drawings
- Historical Sanborn maps
- Historical BUG information available from GPEC files

## 3.2. Underground Utility Clearance

Prior to field investigations, GEI reviewed available utility plans and requested input from plant operations staff. Each proposed boring and subsurface exploration location was identified in the field during a preliminary Site visit and marked with paint or stakes by a GEI representative. GEI's drilling or excavation subcontractor provided the investigation locations to New York City and Long Island One Call Center NY811 to identify potential utility conflicts at the Site boundary and within the street Right-of-Ways (ROWs) adjacent to the Site.

A utility mark-out checklist was completed by GEI for each location prior to commencement of intrusive activities. During the initial phases of the RI, additional geophysical investigation was utilized if there was any uncertainty about proximity of utilities to a boring or test pit location. A geophysical investigation was conducted at all locations during Phase 3 of the RI. In certain cases, geophysical methods were also used to verify the location of a structure to be investigated.

All soil boring and monitoring well locations advanced during the RI were pre-cleared using manual or vacuum extraction methods to a depth of 8 feet bgs. Test pits of 10 feet in length or more that required pre-clearing were pre-cleared at a minimum of two locations to avoid utilities.

## 3.3. Sample Collection and Analysis

Soil, groundwater, and sediment samples collected for environmental laboratory analyses were placed into laboratory supplied containers, properly labeled, packed on ice, and submitted to a NYSDOH Environmental Laboratory Approval Program (ELAP) certified laboratory. Eurofins TestAmerica

Laboratories, Inc. of Shelton, Connecticut (ELAP# 10602) was used for the PDI investigation and the supplemental groundwater investigation (excluding PFAS) and Integrated Analytical Laboratories, LLC of Randolph, New Jersey, (NYSDOH ELAP #11402) was used for the RI and supplemental investigations. PFAS analysis during the 2024/2025 additional groundwater sampling event was conducted by Eurofins Cleveland (ELAP# 10975).

Soil and dense non-aqueous phase liquid (DNAPL) samples collected for forensic analysis were submitted to META Environmental, Inc., of Watertown, Massachusetts.

Geotechnical analysis was provided by TerraSense, LLC of Totowa, New Jersey and JLT Laboratories, Inc., of Canonsburg, Pennsylvania. Cone penetrometer tests (CPT) logs were provided by ConeTec of West Berlin, New Jersey.

SV and ambient air samples were placed into laboratory supplied Summa canisters, properly labeled, and submitted to Eurofins TestAmerica Laboratories, Inc. of Knoxville, Tennessee (ELAP# 10781) or Phoenix Environmental Laboratories, Inc. of Manchester, Connecticut (ELAP# 11301).

Groundwater samples collected for PFAS and 1,4-dioxane analysis during the 2018 Emerging Contaminants Investigation were submitted to Eurofins TestAmerica Laboratories, Inc. of Edison, New Jersey (ELAP# 11452).

Samples were accompanied by a properly completed and signed chain-of-custody and submitted via courier service.

New disposable equipment was used for each sample where possible and reusable sampling equipment (e.g. stainless-steel spoons, hand auger, etc.) were properly decontaminated before and after each use as outlined in the Field Sampling Plan (FSP) (GEI, 2012).

Specific analytical methods are discussed below for the various media sampled during the investigations.

## 3.4. Soil Investigations

The environmental soil investigation at the Site included surface soil sampling and subsurface soil sampling from borings and test pits. A geotechnical investigation was also conducted as part of the PDI, and details are included below. Table 3 provides the rationale for the surface and subsurface soil locations investigated as part of the RI. The locations were primarily selected to investigate former structures or utilities which may have been source areas of contamination. Additional borings were advanced in some locations to delineate identified impacts. Subsurface soil samples were also collected from various geotechnical borings and test pits conducted for capital improvement projects. Sample collection details and rationale are discussed below. The locations of the samples collected during the investigations are presented on Figures 9 through 12.

### *3.4.1. Surface Soil*

Surface soil samples were collected from 34 locations during Phase 2 and Phase 3 of the RI as shown on Figures 11 and 12, respectively. Stainless steel spoons or trowels, or disposable sampling instruments

were used to collect each surface soil sample from the upper two inches beneath vegetative cover as per Technical Guidance for Site Investigation and Remediation (DER-10) requirements for assessing human and ecological resource exposure to soil. An approximate area of 1 square foot was sampled. The exposed soil was screened for VOCs using a photoionization detector (PID).

Following the initial submittal of the draft RI report, additional surface soil sampling was requested by NYSDEC and NYSDOH in the former public ballfield area in Area 9 of the Site to delineate the results found during the RI sampling. The supplemental surface soil sampling was performed in accordance with the work plan dated May 20, 2021 (Appendix G). The sampling was initially conducted on November 4, 2021, with additional samples collected on December 16 and 17, 2021. The December 2021 sample locations were based on the results of the November 2021 sampling and were selected in consultation with NYSDEC and NYSDOH.

A total of six locations were sampled from the infield areas of the three ballfields in November 2021, and total of 16 additional locations were sampled in December 2021. The sampling was conducted to a depth of 2 feet with samples collected from three intervals including 0 to 2 inches, 0 to 6 inches [volatile organic compounds (VOCs) analysis only] and 2 to 24 inches.

### *3.4.2. Test Pits*

A total of 133 test pits were excavated during the investigations, the locations of which are shown on Figures 9 through 12. RI Test pits were excavated to assess the configuration and potential contents of buried structures which were suspected to have been present and to assess whether such buried structures, pipes, and utility lines may affect potential contaminant distribution. Additionally, test pits were also excavated as part of capital improvement projects at the Site.

Each test pit was visually inspected, photographed, and logged by a GEI field representative. Soil visual observations including relative composition, plasticity, strength, moisture content, and pertinent physical properties were noted using a modified Unified Soil Classification System (USCS). Test pits were terminated at the approximate groundwater table, refusal, or a maximum depth of 10 feet bgs, whichever occurred first. Soils were field screened for total organic vapors using a PID. The test pits excavated as part pf the capital improvement projects were generally not logged in accordance with the RI procedures. Relevant visual observations from these test pits have been incorporated into this report.

A minimum of one soil sample was collected for laboratory analysis from the area exhibiting the greatest apparent degree of observed impacts per 10 linear feet of each test pit. If no impacts were observed, a sample was collected from the bottom of the test pit.

Test pits (GPEC-TP01 through GPEC-TP09) were excavated during the PDI along the existing Loading Platform to confirm the geometry of the existing wall and identify other potentially significant features. Soil samples were not collected from these test pits. Test pits GPEC-TP201 through GPEC-TP205 were excavated during Phase 1 of the RI. A total of 31 test pits were excavated during Phase 2 of the RI (GPEC-TP300 through GPEC-TP314, GPEC-TP316 through GPEC-TP318, GPEC-SB318EX, GPEC-TP319 through GPEC-TP325, GPEC-TP325C, GPEC-TP325D, GPEC-TP325E, GPEC-TP326, GPEC-TPUST1, and GPEC-TPUST2). A total of 88 test pits were excavated during Phase 3 of the RI (GPEC-TP400 through

GPEC-TP403, GPEC-TP405 through GPEC-TP409, GPEC-TP411 through GPEC-TP420, GPEC-TP501 through GPEC-TP539, GPEC-TP541 through GPEC-TP557, and GPEC-TP559 through GPEC-TP571). Soil samples were not collected from the GPEC-TP411 test pit due to shallow refusal and the composition of the material encountered within the pit (construction debris). One test pit was excavated by others for a capital improvement project on-Site (GPEC-TP421) that was observed, logged, and sampled by GEI during excavation.

During Phase 1 of the RI, test pit GPEC-TP200, planned to be excavated to the east of the Stores Building to investigate underground utilities, was not excavated due to utility conflicts. During Phase 2 of the RI, GPEC-TP302 was only excavated to a depth of 0.5 feet bgs due to the presence of a concrete obstruction. A sample was not collected from this test pit. Test pit GPEC-TP304 was combined with GPEC-TP305 and total of one sample was collected from the combined test pits. GPEC-TP315 was renumbered as GPEC-TP402 and was excavated during Phase 3 of the RI. Test pits GPEC-TP404 (GPEC-TP347 in the Phase 2/3 RIWP), GPEC-TP410, and GPEC-TP540 (GPEC-TP377 in the Phase 2/3 RIWP) were not excavated due to utility conflicts in the areas during Phase 3 of the RI. Soil borings GPEC-SB402, GPEC-SB406, and GPEC-SB528 were added to these areas, respectively. Test pit GPEC-TP558 (GPEC-TP396 in the Phase 2/3 RIWP) was not excavated due access issues and proximity to vital infrastructure in the LNG facility.

Material removed from the test pits during excavation was temporarily placed on 20-mil high-density polyethylene sheeting adjacent to the pit. Upon completion, the PDI and RI test pits were backfilled in reverse sequence in which it was excavated, so that materials removed from the bottom of the test pit are placed back at the bottom and materials removed from the top of the test pit are placed back at the top. The test pits were backfilled in lifts and compacted using the back-hoe bucket. Excess soils were containerized in a lined roll-off or stockpiled and characterized for disposal. Pavement was restored for test pits which disturbed existing paved areas.

Test pit logs are included in Appendix L.

### *3.4.3. Subsurface Soil Borings*

A total of 245 soil borings were installed during the investigations, the locations of which are shown on Figures 9 through 12. Seventeen of the 245 borings were advanced for geotechnical purposes as part of capital improvement projects. These borings are identified as the GPEC 700, 800 and 900 series borings. Further discussion is provided below in Section 3.13.3. A total of 21 shallow borings were installed within the proposed Maspeth Regulator Station footprint (Area 3) for soil characterization and reuse in 2010 and 2011. Soil boring logs are included in Appendix M. As outlined in Section 3.2, all boring locations were hand cleared to a minimum depth of 8 feet bgs for utility clearance purposes.

A variety of drilling methods were used during the investigations including manual or vacuum excavation, hollow-stem auger, mud-rotary, direct push, and sonic drilling. Each of the drilling methods allowed for continuous soil samples to be taken from the ground surface to the bottom of the borehole for both field characterization and for the collection of samples for chemical analyses.

Soil cores were visually inspected and logged by GEI's on-Site field personnel and soil visual observations including composition, plasticity/strength, moisture content, and other pertinent physical properties,

were noted and classified using a modified USCS. Soils were field screened for organic vapors using a PID.

The terminal depths of the borings varied based on the objectives of the investigation. During the PDI, the majority of the borings were advanced to a minimum of 100 feet bgs, and several other borings were advanced to a minimum of 50 feet bgs. During Phase 1 of the RI, the borings in the area of the Loading Platform were advanced to approximately 100 feet bgs, several of which penetrated into the Gardiners clay unit, while the inland borings were advanced to a minimum of approximately 85 feet bgs but varied based on the ground surface elevation at each location (terminating in the glacial outwash deposits). Shallow and deep borings were advanced during Phase 2 and Phase 3 of the RI. The deep borings were generally advanced to approximately El. -60 feet above msl, similar to the inland borings advanced during Phase 1, and some were advanced to approximately El. -100 feet above msl. Shallow borings during Phase 2 of the RI were advanced to the meadow mat surface, which generally ranged from 20 to 25 feet bgs, or to a maximum depth of 30 feet if the meadow mat was not encountered. Shallow borings during Phase 3 of the RI were advanced to at least 30 feet bgs to further delineate impacts identified during the test pitting program. During the Loading Platform Area Investigation, borings were advanced to a minimum of approximately El. -40 feet above msl. During the Groundwater Model Investigation, borings were advanced to various depths ranging from 15 to 190 feet bgs. The geotechnical borings performed as part of capital improvement projects on-Site were advanced to various depths in accordance with the technical requirements of the specific projects. During all of the investigations, in general, the borings were advanced at least 10-feet below the deepest identified impacts.

If visual observations of potentially DNAPL-saturated soil were identified above a stratigraphic change in the formation or potential confining layer in a boring, an outer casing was advanced to isolate the contaminated zone. The outer casing was temporarily seated in a 5-foot-thick column of bentonite slurry or a minimum of 5 feet into the confining unit. Once the outer casing was seated in the bentonite, drilling continued below the outer casing. This technique is known as telescoping drilling and is used to avoid potentially transporting contamination vertically downward through a confining layer. This scenario was encountered in several borings conducted during the investigations. DNAPL recovery wells were installed at several locations (GPEC-SB304, GPEC-SB332, and GPEC-RW409) as described in Section 3.10.

Following advancement, some borings were completed as individual monitoring wells or piezometers (in select Phase 2 shallow boring locations). Monitoring well clusters were also installed at some locations as part of a hydrological investigation for the cutoff wall IRM evaluation. In locations where monitoring well clusters were installed, the soil boring was generally advanced in the location of the deep monitoring well. The monitoring wells and piezometers were constructed as detailed in Sections 3.5 and 3.9, respectively.

During Phase 2 of the RI, soil borings GPEC-SB301 and GPEC-SB345 were not advanced to depth due to their proximity to PDI borings (GPEC-SB102 and GT-01, respectively). Identification numbers GPEC-SB303, GPEC-SB312, GPEC-SB327, GPEC-SB335, GPEC-SB337, and GPEC-SB338 were not assigned locations in the work plan titled “Boring Location Selection Plan” (dated January 30, 2015) and therefore, were not used. During Phase 3 of the RI, GPEC-SB407 was cleared for utilities to 8 feet bgs, but the boring was not advanced further due to utility conflicts in the area.

In general, up to three soil samples per boring were collected for laboratory analysis based on the following sampling procedures:

- **0 to 8 feet bgs (Utility Clearance interval):** from the depth interval indicating the greatest apparent degree of impact based on field observations (odors, staining, PID, etc.). If no impacts were observed, then a soil sample was collected at 5 feet bgs.
- **Below 8 feet bgs (below Utility Clearance Interval to Termination Depth):** from the depth interval indicating the greatest apparent degree of impacts based on field observations (odors, staining, PID, etc.). If no impacts were observed, then a sample was typically collected from the depth of the observed groundwater table.
- The boring termination depth.

Upon completion, soil borings that were not completed with monitoring wells or piezometers were tremie grouted from the termination depth up to the ground surface using a cement/ bentonite slurry mixture.

### *3.4.4. Surficial and Subsurface Soil Analysis*

A total of 34 surficial and 603 subsurface soil samples collected from test pits and soil borings were submitted for laboratory analysis of the following parameters:

- VOCs by the USEPA Method 8260B or 8260C (excluding Phase 3 RI surficial samples)
- SVOCs by USEPA Method 8270C
- Target Analyte List (TAL) metals by USEPA Method 6000/7000 series
- PCBs by USEPA Method 8082
- Free cyanide by USEPA Method 9016
- Hexavalent chromium by USEPA Method 3060A/7196
- Total organic carbon (TOC) by Lloyd Kahn Method.

During the PDI, TOC and total cyanide were analyzed in select samples and free cyanide analysis was performed by American Society for Testing and Materials (ASTM) method D4282-02.

In addition to the above-mentioned analyses, samples collected from ground surface to 8 feet bgs during the RI and supplemental investigations were analyzed for pesticides via USEPA Method 8081A and herbicides via USEPA Method 8151A.

Twenty soil samples collected during Phase 1 of the investigation from borings GPEC-SB203 through GPEC-SB216 were also analyzed for the following hydrocarbon characterization parameters:

- PAHs and alkyl PAHs by USEPA Method 8270C using Selective Ion Monitoring (SIM)
- N-alkanes and isoprenoids including DRO and total petroleum hydrocarbons (TPH) ranges by USEPA Method 8100.

Samples were also collected for disposal parameters where appropriate.

### *3.4.5. PDI Geotechnical Investigation*

Geotechnical analysis was conducted at numerous locations during the PDI on the Site, as well as within the sediment of Newtown Creek to evaluate potential constructability and design considerations should a containment barrier be required based on the outcome of the PDI work. As mentioned previously, NYSDEC agreed that a containment barrier was not required at the conclusion of the PDI work. Geotechnical borings included the GT-series (GPEC-GT01 through GPEC-GT26) and the SB-100 series (GPEC-SB102 through GPEC-SB106, GPEC-SB109, GPEC-SB113, and GPEC-SB114) as shown on Figure 9. Geotechnical locations within the creek included GPEC-GT12, GPEC-GT14, GPEC-GT16, GPEC-GT18, GPEC-GT20, GPEC-GT22, GPEC-SB113, and GPEC-SB114. Boring logs for the landside and sediment logs for the locations are provided in Appendices J and N, respectively.

CPTs were performed at borings GPEC-GT02, GPEC-GT06, GPEC-GT09, GPEC-GT11, GPEC-GT13, GPEC-GT15, GPEC-GT17, GPEC-GT19, GPEC-GT21, and GPEC-GT23 through GPEC-GT26. At the remaining locations, geotechnical laboratory testing of soil index properties was conducted. Geotechnical field testing included Standard Penetration Tests and split barrel sample collection. Laboratory index testing consisted of grain-size analyses (including hydrometer analyses), Atterberg Limits, and moisture content, and were performed on representative soil samples. The results of the geotechnical testing are provided in Appendix N.

Environmental samples collected from the PDI geotechnical borings were analyzed for the parameters listed in Section 3.4.4 above.

## 3.5. Groundwater Monitoring Well Installation

A total of 94 monitoring wells were installed during the investigations, many of which were installed as clusters. Rational for the monitoring well installations are included in Table 3. Three of these wells were installed as part of a capital improvement project and were used for gauging purposes but were not sampled. In addition, 14 existing monitoring wells and two piezometers, which have been used for sampling, or monitoring, have been installed by others at the Site. The locations of the monitoring wells are shown on Figure 13. Monitoring well construction logs are provided in Appendix O.

The individual monitoring wells and the monitoring well clusters were installed to provide information regarding groundwater flow patterns and gradient evaluations, as well as to assess groundwater quality conditions at the Site. The monitoring well clusters were generally screened to intersect the shallow, intermediate, and deep aquifer zones at the Site. Shallow wells were screened to intersect the groundwater table and extended approximately three feet above the observed water table. The screened zones for the intermediate and deep monitoring wells were generally selected based on the depths of lower permeability units at the Site where present (meadow mat, intermediate clays, or Gardiners Clay). If visual observations of potentially DNAPL-saturated soils were noted during boring advancement, monitoring wells were installed and screened across the saturated zones.

Groundwater monitoring wells were installed using either roto-sonic, hollow-stem auger, direct-push, or mud-rotary drilling methods. Monitoring wells were completed in accordance with the approved work plans and were generally constructed of 2-inch inner diameter (ID) Schedule 40 polyvinyl chloride (PVC) riser pipe and 0.020-inch slotted well screen. Screen lengths were a minimum of 10 feet long and were adjusted in the field based on observations of geology and contamination impacts.

Where visual observations of potentially DNAPL-saturated impacts were identified in soil during drilling, a monitoring well, or recovery well in select cases, with a sump was installed and screened across the impacted zone. These wells were terminated on top of an observed confining layer or lithologic change which could retard vertical migration of NAPL. The wells were then subsequently monitored for potential accumulation of product. Further discussion of DNAPL monitoring is provided in Section 3.6.2. A summary of well construction details is provided in Table 4.

Accumulating DNAPL was visually observed in monitoring well GPEC-MW01 (installed during the PDI). As a result, the well was re-installed during Phase 1 of the RI with stainless steel well materials including a 0.010-inch slotted screen and a 5-foot sump. GPEC-MW205 located in the same area, was installed similarly.

Following well installation, each newly constructed monitoring well was developed by alternatively surging and pumping for a maximum of 1 hour per well, until turbidity was measured less than 50 nephelometric turbidity units (NTU), or until 10 well volumes of water were removed. A field turbidity meter was used to monitor turbidity during development. Well development was completed in general accordance with the FSP (GEI, 2012) and purged groundwater was containerized in 55-gallon Department of Transportation (DOT) drums or a fractionation tank and was disposed of by National Grid at an approved facility.

Newly installed monitoring wells were surveyed and allowed a minimum of two weeks to equilibrate with aquifer conditions prior to conducting water level measurements or sampling.

Monitoring well cluster GPEC-MW219 consisting of a shallow, intermediate and deep well was destroyed sometime following the 2012 sampling event. The well cluster was re-installed in 2024 prior to the start of the additional groundwater sampling event.

## 3.6. Groundwater Monitoring

### *3.6.1. Depth-to Water Measurements*

Synoptic groundwater level measurements were collected during high and low tidal cycles using an electronic water level meter accurate to 0.01 feet. Depth to water and depth to bottom of monitoring wells was measured from the surveyed elevation mark on the well riser. The water level indicator was decontaminated between measurement locations in accordance with field procedures in the RIWP. Depth to water measurements and calculated groundwater elevations are provided in Table 4. Groundwater contour maps were generated, and a discussion of the data is provided in Section 4.

Synoptic groundwater level measurement rounds were conducted during the RI program on December 12, 2012, and October 9, 2015. A synoptic groundwater level measurement round was also conducted on March 29, 2017, for the Groundwater Model Investigation (as discussed in Section 3.12.2) and during the 2024/2025 additional groundwater sampling event.

### *3.6.2. NAPL Measurements*

An oil-water interface probe was used to confirm that no LNAPL was present in each monitoring well. DNAPL was measured by slowly lowering a weighted tape measure to the bottom of the well. The depth to the bottom of the well was then recorded (to the nearest 0.01 feet). The tape measure was then removed over plastic sheeting/sorbent pads and the thickness of DNAPL was measured at the base of the tape to the nearest 0.1 feet. DNAPL thickness measurements, which have been conducted monthly since November 2015, are provided in Table 5, and a discussion of the data are provided in Section 5.2.4. In monitoring wells with measurable thicknesses of DNAPL, DNAPL rebound testing was conducted as described in Section 5.2.3.

### *3.6.3. Groundwater Purging*

Monitoring wells were purged and sampled using low-flow sampling techniques in accordance with the approved FSP. Purging and sampling were primarily conducted using a bladder pump; however, a peristaltic pump and submersible pump were also used for the sampling of several wells. New polyethylene tubing was lowered to the approximate midpoint of the screen interval and connected to the pump. Field measurements for temperature, pH, specific conductivity, oxidation-reduction potential (ORP), dissolved oxygen (DO) and turbidity were collected using a multi-parameter water quality meter equipped with a flow-through cell and recorded at 3-to-5-minute intervals. Wells were purged until water quality parameters were considered stabilized when a minimum of three consecutive readings met the following parameters:

- pH (+/-0.1 standard units)
- temperature (+/-3%)
- turbidity (+/-10% if >5 NTU; if values are <5 NTU, values considered stabilized)
- DO [+/-10% if >0.5 mg/L; if values are <0.5 mg/L, values considered stabilized]
- ORP [+/-10 millivolts (mV)]

Field parameter measurements were recorded on Groundwater Sampling Forms included in Appendix P.

### *3.6.4. Groundwater Analysis*

A total of 145 groundwater samples from 95 wells during the PDI and RI phases were submitted for laboratory analysis of the following parameters:

- VOCs by USEPA method 8260B
- SVOCs by USEPA method 8270C

- TAL metals by USEPA method 6000/7000 series
- PCBs by USEPA method 8082
- Total cyanide by USEPA Method 9012B
- Free cyanide by USEPA method 9016

During the Loading Platform Area Investigation, select samples were analyzed for monitored natural attenuation (MNA) parameters including dissolved iron, nitrate by Standard Method 4500-NO3-F, and sulfate by ASTM method D516.

During the 2018 Emerging Contaminant Groundwater Investigation, select samples were analyzed for TAL PFAS by USEPA method 537 and 1,4-dioxane by USEPA method SIM 8270D.

A total of 93 groundwater samples from 93 wells during the 2024/2025 additional groundwater sampling event were submitted for laboratory analysis of the following parameters:

- TCL VOCs by USEPA Method 8260B
- TCL SVOCs by USEPA Method 8270C
- TAL metals by USEPA Method 6000/7000 series (filtered)
- PCBs by USEPA Method 8082
- EPH [C19-C36] - MAEPH Method[1]

[1]: Analysis performed on all wells located in Areas 1 and 2 of the Site.

In addition, a subset of wells (~35% of the full well list) were sampled for PFAS analysis via USEPA Method 1633 during the 2024/2025 additional groundwater sampling event. The well set included locations on the upgradient and downgradient edges of the Site, as well as a set in the center portion of the Site and along the Maspeth Avenue Site boundary.

Groundwater samples were not collected from monitoring wells where NAPL was present at the time of sampling.

### *3.6.5. DNAPL Chemical Analysis*

DNAPL recovered from monitoring wells GPEC-MW01R and GPEC-SB205 was analyzed for the following hydrocarbon characterization parameters:

- PAHs and alkyl PAHs by USEPA Method 8270C using SIM
- N-alkanes and isoprenoids including DRO and TPH ranges by USEPA Method 8100

## 3.7. Sediment Investigation

Sediment sampling was conducted as part of the PDI (initial and supplemental phases) to further assess the presence of NAPL in Newtown Creek outboard of the Loading Platform/ dock structure. Thirty-one

sediment cores (GPEC-SED01 through GPEC-SED31) were advanced using Vibracore methods in July 2010 to a depth of approximately 20-feet below the mudline of the creek. Surface sediment samples (0 to 10 cm) were taken adjacent to each core. In addition to the sediment cores, 11 borings (GPEC-SB110 through GPEC-SB114, GPEC-GT12, GPEC-GT14, GPEC-GT16, GPEC-GT18, GPEC-GT20, and GPEC-GT22) were advanced within the creek sediment for geotechnical and environmental purposes (GT-and SB-series borings, respectively). The SB-series borings were advanced using sonic drilling techniques to a minimum depth of 75 feet below the mudline of the creek. The GT-series borings within the creek were advanced between 52 feet and 104 feet below the mudline of the creek using mud-rotary drilling methods. A barge and pontoon boat were utilized for the sediment sampling conducted within Newtown Creek.

The locations are shown on Figure 9. Sediment core logs are presented in Appendix Q.

### *3.7.1. SED-Series Borings*

Surface sediment and subsurface sediment samples were taken during the SED-series program. A total of 31 borings were advanced and 181 samples collected during June 2010. The methods utilized are describes below.

#### 3.7.1.1. Surface Sediment Sampling

Surface sediment samples were collected using an Eckman sampler, modified Eckman sampler, modified Van Veen sampler, a Petit Ponar sampler, or similar sampling device as appropriate for the type of sediment sample being collected. Surface sediment samples were collected to characterize the chemical nature of the surface sediments.

Surface sediments were collected from 0 to 0.33 feet (0 to 10 cm) below the mudline. This sampling depth is consistent with the typical depth for the biologically active zone sampled in coastal sediments.

#### 3.7.1.2. Subsurface Sediment Sampling

Subsurface sediment cores were advanced using Vibracore methods to achieve contact with the native (pre-navigation channel) soil unit or to a depth of approximately 20 feet (610 cm) below the mudline, whichever came first. Sediment samples were collected from each core at up to seven intervals between the mudline and the top of the native soil unit and within the native soil unit.

Grab surface sediment samples were co-located and collected coincident with each subsurface sediment core location. For that reason, the 0- to 0.33-feet interval was not collected from the core sample.

#### 3.7.1.3. Analysis

The sediment samples were analyzed for:

- SVOCs by USEPA method 8270C
- PCBs by USEPA method 8082
- Pesticides by USEPA method 8081

- Herbicides by USEPA method 8151
- Metals by USEPA method 602
- Total cyanide by USEPA method 9012B
- Other parameters including ammonia, black carbon, pH, Sulfide, total nitrogen, total organic carbon, and total phosphorus.

Samples were selected for VOC analysis from zones where PID readings above background were observed, as well as zones above and below the zones with readings above background PID readings.

Additional samples from each location were frozen at -20 degrees Celsius and archived. Of these archived subsurface sediment samples, approximately 25 percent of the samples were selected for analysis for organochlorine pesticides by high-resolution mass spectrometry and dioxins and furans. These samples were selected to be spatially distributed throughout the sampling area and among varying sediment types (e.g., gravel, sand, silt, etc.) and based on the chemical analytical results for the other constituents and analytical methods. In addition, selected samples were analyzed for TPH, DRO, normal alkanes and isoprenoid hydrocarbons, and alkylated PAHs.

### *3.7.2. GT- and SB-Series Borings*

The deep sediment borings (SB-series and GT-series) were advanced using rotosonic and mud-rotary drilling techniques, respectively. Five borings were advanced during the SB-series and six were advanced during the GT series. The SB-series borings were advanced in June and July 2010 to a minimum of 75 feet below the observed mudline of the creek until a lower permeability unit was encountered. The GT-series borings were advanced in August and September 2009 as part of the PDI geotechnical investigation discussed in Section 3.4.5. The depths of the GT-series borings varied between 52 feet and 104 feet below the mudline of the creek. Upon completion, the deep sediment borings were tremie grouted to the mudline using a cement/bentonite slurry mixture.

Samples were collected in areas of identified environmental impacts, at changes in lithology (GT-series) and near the base of the boring. Each soil or sediment sample was analyzed for:

- VOCs by the USEPA SW-846 method 8260B
- SVOCs by USEPA method 8270C
- TAL metals by USEPA method 6000/7000 series
- PCBs by USEPA method 8082
- Free cyanide extraction by USEPA method 9013A and analysis by Microdiffusion, ASTM method D4282-02
- Hexavalent chromium by USEPA method 3060A/7196
- TOC by USEPA method 9060 (select samples)

## 3.8. Soil Vapor Intrusion Investigation

Soil vapor intrusion (SVI) sampling was conducted during Phase 3 of the RI at 14 Site buildings (four large and 10 small) based on their occupancy of 8 hours or more during the work week. Sub-slab (SS) SV samples were collected to screen SV, IA samples were collected to assess the potential for SVI into the Site buildings, and outdoor air (OA) samples were collected to determine background air quality. A total of 38 SV, 39 IA, and 21 OA samples were collected over three sampling events; an initial sampling event (March 2018), a first resampling event to confirm select analytical results from the initial sampling (March 2019), and a second resampling event to confirm select analytical results from the first resampling event (June 2019). The locations of the SVI samples are shown in Figure 14. Two additional small buildings were planned for sampling; however, due underground utility conflicts in Building 13 and limited occupancy in the Varick Control House (below 8 hours per week) samples were not collected from these locations. Similarly, two SS samples and their corresponding IA samples (GPEC-IA/SV306 and GPEC-IA/SV334) were not collected due to utility conflicts beneath the buildings.

The SVI investigation was generally conducted as outlined in the RIWP and a subsequent SVI work plan, and in general accordance with the SVI Guidance and National Grid's "*Draft Standard Operating Procedures for Soil Vapor Intrusion Evaluations at National Grid MGP Sites in New York State*."

The SV sampling points were installed within building interiors as permanent SS SV points excluding three locations (GPEC-SV304, GPEC-SV310, and GPEC-SV317) where temporary points were installed and two locations (GPEC-SV327 and GPEC-SV330) where proxy points were installed outside of the buildings in which drilling was not permitted. The SS SV points were installed by drilling a hole through the concrete floor slab and then fitting the point with Teflon tubing. The Teflon tubing was plugged following installation. Each SS SV point was sealed with non-shrinking grout and completed with a flush-mount utility cover.

To ensure that the sampling tube was sealed from the ambient air aboveground, helium was used as a tracer gas as described in the SVI Guidance document.

The IA and OA samples were collected from the approximate breathing zone height (3 to 5 feet aboveground).

Each sample was collected using an individually certified 6-liter Summa canister with a laboratory-supplied flow controller calibrated to an 8-hour period. The regulator flow rate did not exceed 0.2 liters per minute (L/min). Each sample was analyzed for VOCs and naphthalene by USEPA method TO-15. The initial sampling event and the first resampling event occurred in the winter heating season (between November 15 and March 30).

Building inventory information was also collected in general accordance with the SVI Guidance document.

One additional sampling event was conducted in February 2021 in accordance with the recommendations included in the initial submittal of the draft RI report (January 2020). The sampling

included one SS SV and one IA location in Building 21-Facilities and one IA location at Building A-Gatehouse.

Following the SVI investigations, a PDI for the potential installation of SSDSs in four buildings to address identified SV impacts was conducted. As part of this event, additional SV samples were collected, along with the performance of SS pilot testing to determine soil communication under the building slabs and the collection of effluent samples. The PDI SV samples were collected as described above. The pilot testing and effluent sampling was conducted as follows:

A total of six temporary soil gas extraction points (two each in the Stores and Transportation Buildings and one each in the Facilities Building and Building 11) were installed by coring a hole through the concrete floor slab in order to create an open space to install the extraction well points. A 2-inch PVC well point was constructed within the opening and backfilled with sand and cemented at the surface at each location. The properties of the fill beneath the slab (soil type, compaction) and the thickness of the slab were noted.

A regenerative vacuum blower was connected to the extraction point via a flexible hose and sealed prior to applying the vacuum. Vapor monitoring points (VMPs) were installed by drilling holes through the slab, inserting tubing through the hole, and sealing the annular space. VMPs were located at varying distances and directions radially outward from each extraction point.

At each extraction point, four step tests were conducted at various applied vacuums. The vacuum response was measured at each VMP using a digital manometer. At the conclusion of the testing, the well point and all tubing was removed and the floor sealed.

An effluent sample was collected at the conclusion of each pilot test at the six locations referenced above to evaluate the need for effluent treatment. The effluent samples were collected in batch certified 6-liter SUMMA® canisters and shipped to an approved NYSDOH ELAP registered laboratory and analyzed for VOCs and naphthalene using USEPA method TO 15.

The SVI Investigation Summary report, SVI Investigation Resampling Summary report, the Additional Soil Vapor Intrusion Sampling Summary report, as well as the SSDS PDI Summary and Design Reports, the SSDS Construction Completion Report and the first SSDS annual report are included as Appendix H.

## 3.9. Piezometer Installations

As discussed above, many of the shallow soil boring locations advanced during Phase 2 of the RI were converted into piezometers, identified as the GPEC-PZ series on Figure 13. The piezometers were installed to better understand the shallow groundwater flow patterns in the southern area (Areas 4 and 5) of the Site. It was suspected that groundwater flow in the area was affected by the presence of the meadow mat, former drainage channels, utility corridors (as discussed in Section 4.2.1), as well as the tidal cycle. Piezometers were also installed on-Site to investigate preferential groundwater flow pathways along major utility corridors (as discussed in Section 3.11) and in Maspeth Avenue to evaluate the influence of the 60-inch sewer main on groundwater flow in the area (as discussed in Section 3.12.2), identified as the GPEC-SIS series on Figure 13.

In total, 33 piezometers were installed to intersect the water table in the area. The piezometers are generally constructed of 1-inch ID Schedule 40 PVC riser and a 10-foot section 0.010-inch slotted well screen installed across the water table.

The piezometers were not developed following installation, as they were not planned for groundwater sampling.

## 3.10. Recovery Well Installations

Two recovery wells (GPEC-RW304 and GPEC-RW332) were installed during Phase 2 of the RI in Area 5 in the vicinity of Holder 1, and one recovery well (GPEC-RW409) was installed during the Loading Platform Area Investigation in Area 1 (Figure 13). Intervals of potentially DNAPL-saturated soil were visually observed just above confining units at these locations; the meadow mat in Area 5 and a tight silt layer in Area 1. The GPEC-RW304 and GPEC-RW332 recovery wells were installed with a 4-inch ID Schedule 40 PVC riser and 0.030-inch stainless steel slotted well screen with screen lengths of 15 feet and 10 feet, respectively. A 3-foot sump was installed in GPEC-RW304 and a 2.5-foot sump was installed in GPEC-RW332 within the meadow mat layer. The lengths of the sumps were reduced from the typical 5-foot length to avoid penetrating the meadow mat. The GPEC-RW409 recovery well was installed with a 6-inch ID Schedule 40 PVC riser, 0.020-inch slot stainless steel wire-wrapped well screen with a screen length of 10 feet, and a 5-foot stainless steel sump. The recovery well screen lengths were based on the visually observed interval of potential DNAPL saturation in the borings.

## 3.11. Stormwater Evaluation

A stormwater evaluation initially described in the PDI work plan was conducted in 2013 to:

- Assess the effect of potential preferential groundwater flow pathways along major utility corridors.
- Assess the effect of buried structures and impervious areas on groundwater flow Site-wide.

The study was conducted to investigate potential preferential flow pathways along the central utility corridor for the former MGP process area (along the Stores Building and Service Building).
The Maspeth Avenue corridor was also initially chosen because it contains a 48-inch diameter stormwater line, which is the largest known stormwater line connected to the Site and, therefore, has the greater potential to result in measurable effects on groundwater flow; however, the study was never completed in this area. Instead, the study was ultimately conducted along the central utility corridor for the former plant (along the Stores Building and Service Building) that contains two 36-inch diameter stormwater lines and a variety of other utilities (Figure 3), which was subsequently determined to collectively have a higher potential to measurably affect groundwater flow than the 48-inch diameter stormwater line in Maspeth Avenue.

Piezometers were installed within or adjacent to the utility corridors, and at 50 and 125 feet from (perpendicular to) the utility corridor (GPEC-SIS2 through GPEC-SIS5 in the central utility corridor and GPEC-SIS6 through GPEC-SIS8 in the Maspeth Avenue corridor) to assess groundwater drawdown or mounding approaching the corridors (Figure 13). Control locations were selected farther from the

potential influences. Pressure transducers were installed and water level elevations were logged electronically for a period of approximately six days within selected piezometers, wells and within the area manholes to evaluate tidal and barometric pressure affects, and associated fluctuations caused by potential leakage into or out of the drains.

Portions of the storm sewer system were inspected visually. These include the central utility corridor, as well as portions of the system in the vicinity of Maspeth Avenue which were investigated as part of a Spill reported in English Kills.

The findings of the investigation in the vicinity of Maspeth Avenue were summarized in a memorandum submitted to NYSDEC on June 6, 2019. No evidence of an ongoing release from the Site was identified.

## 3.12. Hydrogeologic Studies

### *3.12.1. Hydraulic Conductivity Testing*

Hydraulic conductivity testing (slug testing) was conducted in the field to obtain estimates of hydraulic conductivity in the shallow and intermediate zone of the Upper Glacial aquifer. Field tests were conducted between December 10, 2015, and December 18, 2015. The primary areas of interest included the vicinity of the Loading Platform fronting Newtown Creek and along Maspeth Avenue. The slug test locations were selected to provide lateral and vertical coverage in the areas of interest described above.

Slug testing was conducted utilizing both rising and falling head slug test techniques. Rising head tests were performed in wells screened across the water table, and in wells screened entirely below the water table. Falling head tests were only performed in wells screened completely below the water table. Slug tests were performed in general accordance with the FSP and were conducted by rapidly removing (rising head) and introducing (falling head) a known quantity of water through use of a submerged bailer to cause a near instantaneous water level change in the well and recording changes in the hydraulic head using a pressure transducer and portable data logger.

In general, a minimum of two tests were performed per well. For wells screened below the water table, a minimum of two rising head and two falling head tests were performed. For wells screened across the water table, at least two rising head tests were performed. The exceptions included several wells with extremely slow recovery times. Only one test was performed at these wells due to the time required to complete the test and logistical constraints. Additional tests were performed if measurements did not produce an obvious linear or logarithmic recovery trend.

Hydraulic conductivity values were calculated using either the Hvorslev (1951) type curve method or the Bouwer and Rice (1976, 1989) method as discussed in Section 4.2. The Hvorslev analysis assumes that the well penetrates a confined aquifer, and the Bouwer and Rice method was used for wells screened across the water table. The slug test summary report is included as Appendix R.

### *3.12.2. Groundwater Model*

A three-dimensional groundwater model was developed for the Site to provide further quantitative understanding of the Site aquifer system, and its interrelation with surrounding influences. The model

uses hydrogeologic characterization data collected as part of this RI, and additional data contained in regional publications and third-party site reports. Methodology for the modeling comprises the use of Visual MODFLOW, a proprietary interface running the open-source USGS code MODFLOW.

Details of the model development, calibration, and source data sets are provided in Appendix D. The model was developed to represent typical steady-state flow conditions as influenced by the average tide level in surface water. The model has five computational layers to represent stratigraphic variation. The model was calibrated to match observed groundwater elevations within statistical tolerances, and to qualitatively match Site and regional flow patterns. Methods for results evaluation consisted of:

- Graphical interpretation of computed groundwater contours on a layer basis
- Particle tracking for evaluation of flow direction; and
- Zone Budget analysis for calculation of groundwater flow rates.

Results are presented in Section 4.3.

## 3.13. Supplemental Investigations

Other supplemental investigations were performed at the Site as described below. These were done for various reasons including to investigate specific issues (Loading Platform Investigation), as required by NYSDEC (Emerging Contaminants Investigation), or as part of non-RI activities (Capital Improvement Projects) during which information relevant to the RI was obtained. Additionally, a Groundwater Model Investigation was conducted as a supplemental investigation (Section 3.12.2, above).

### *3.13.1. Loading Platform Area Investigation*

The Loading Platform Area Investigation was performed as a supplemental investigation during Phase 3 of the RI to evaluate whether NAPL observed by New York City floating on the water surface off the southern portion of the Loading Platform was related to migration of NAPL from the Site. The Site sits adjacent to the Turning Basin portion of the Newtown Creek Superfund site. Immediately adjacent and beneath the Loading Platform, the Turning Basin represents a depositional environment with up to 15 feet of soft sediments that have been deposited near the south end of the Loading Platform since the area was last dredged in 1949. The investigation was performed from February 20, 2017, through June 8, 2017 in accordance with GEI's NYSDEC approved work plan dated January 11, 2017.

A total of 17 soil borings (GPEC-MW403 through GPEC-MW410, GPEC-SB404A through GPEC-SB408A, and GPEC-SB414 through GPEC-SB417) were advanced and eight monitoring wells (GPEC-MW403 through GPEC-MW410) and one recovery well (GPEC-RW409) were installed (Figures 12 and 13). The borings were advanced to a minimum of El. -40 feet above msl (12 feet below the original design dredge depth of the creek at El. -28), which corresponds to approximately 28 feet below the current mudline along the facing of the dock structure at El. -12 feet above msl. The screen zones of the monitoring wells were selected based on their proximity to impacted zones identified during boring advancement.

The soil borings were advanced, and the monitoring and recovery wells installed using rotary-sonic and direct-push techniques. Boreholes in which a well was not installed, as well as any open sections of

boreholes beneath the installed wells, were tremie grouted to the surface with a cement/bentonite grout. The soil borings and monitoring and recovery wells were installed in accordance with the approved Phase 2/3 RIWP, and as discussed in Sections 3.4.3, 3.5, and 3.10, respectively. Well development, investigative-derived waste (IDW) management, and the implementation of a community air monitoring program (CAMP) were also conducted in accordance with the RIWP, and as discussed in Sections 3.5, 3.16, and 3.15, respectively.

No analytical soil samples were collected. The monitoring wells were purged and sampled using low-flow groundwater sampling procedures in accordance with the RIWP and as discussed in Section 3.6.3. The recovery well is gauged monthly, and results are provided in Table 5. The groundwater samples were analyzed for the parameters listed in Section 3.6.4.

It was concluded in the Loading Platform Area Investigation Report, dated November 30, 2017, that there was no potentially mobile NAPL identified that could account for the NAPL observed floating on the water surface at the southern portion of the Loading Platform. Potential NAPL-saturation identified during the investigation (GPEC-MW409/RW409 area) did not appear to be mobile due to a lack of NAPL accumulation in the recovery well screened across the potentially saturated zone and a lack of potentially DNAPL-saturated soil in delineation borings advanced in the area. Therefore, there is not a complete migration pathway for the NAPL identified in the area to sediments or surface water in Newtown Creek. There are also no identified migration pathways for previously identified NAPL within the intermediate and deep zones (significantly below the elevation of sediments in Newtown Creek) to the sediments or surface water in Newtown Creek. Upon review of the Loading Platform Area Investigation Report, the NYSDEC concurred with GEI's investigation conclusion in a letter dated June 26, 2018, that mobile NAPL does not appear to be present in the Loading Platform area adjacent to Newtown Creek.

The Loading Platform Area Investigation Report, work plan, and NYSDEC approvals are included as Appendix E.

### *3.13.2. Emerging Contaminant Groundwater Investigation*

At the request of NYSDEC, the Emerging Contaminant Groundwater Investigation was performed as a supplemental investigation during Phase 3 of the RI to screen for emerging contaminants (PFAS and 1,4-dioxane) in groundwater on-Site. The investigation was performed on October 1, 2018, in accordance with GEI's NYSDEC approved September 4, 2018, work plan.

Three monitoring wells (GPEC-MW220I, GPEC-MW11, and GPEC-MW3S) were purged and sampled using low-flow groundwater sampling procedures in accordance with the work plan and as generally discussed in Section 3.6.3. The groundwater samples were analyzed for the parameters listed in Section 3.6.4. The results of this investigation are further discussed in Section 5.

It was concluded in the Emerging Contaminant Groundwater Sampling Report, dated February 2019, that PFAS and 1,4-dioxane are not associated with former MGP operations. Also, since 1,4-dioxane and PFAS were not in use prior to the 1950s or 1940s, respectively, it is highly unlikely that these chemicals were

used at MGP sites. Since the Site is located within a highly industrialized area, there are many potential off-Site sources of the 1,4-dioxane and PFAS compounds.

The Emerging Contaminant Groundwater Sampling Report is included as Appendix F.

### *3.13.3. 2024/2025 Additional Groundwater Sampling Event*

As requested by NYSDEC in their February 4, 2024, comment letter on the Draft RI report and as agreed in the response letter dated April 12, 2024, an additional groundwater sampling event was conducted in accordance with the work plan dated August 30, 2024. Prior to sampling, a well inventory was conducted to determine the status and condition of the wells in the network. Wells determined to have a significant amount of silt buildup (generally over 1 foot), were redeveloped prior to sampling. Re-development was conducted using a submersible pump, which was used to pump and surge the well to allow for the removal of silt. Re-development was considered complete when the silt levels were reduced to the extent feasible, and the turbidity was reduced to below 50 NTUs. A synoptic water level measurement round was also conducted prior to sampling.

A total of 93 monitoring wells were purged and sampled using low-flow groundwater sampling procedures in accordance with the work plan and as generally discussed in Section 3.6.3. All on-site wells were sampled with the following exceptions:

- GPEC-MW505S and GPEC-MW505D which were destroyed prior to the sampling event.
- GPEC-MW01R, GPEC-MW205 and GPEC-MW3D, which are deep wells that contained measurable thicknesses of DNAPL. Each of these wells are at depths of 65 feet, 80 feet and 107 feet, respectively, and as a result, the DNAPL measured in them cannot impact sediments or the water column of Newtown Creek.

DNAPL was first detected and measured in GPEC-MW3D during and following re-development on December 4, 2024.

As stated above in Section 3.5 three wells in the GPEC-MW219 cluster were re-installed prior to this sampling event.

PFAS samples were collected from a subset of wells (33 in total) selected in consultation with NYSDEC. The wells selected were generally located throughout the Site and in each of the depth zones, following the procedures outlined in NYSDEC's document titled "Sampling, Analysis, And Assessment of Per-And Polyfluoroalkyl Substances (PFAS)", dated April 2023. The groundwater samples were analyzed for the parameters listed in Section 3.6.4. The results of this investigation are further discussed in Section 5.

### *3.13.4. Capital Improvement Projects*

Various capital improvement projects have occurred at the Site over the course of the investigations. These projects generally consisted of excavations to either access or install infrastructure or geotechnical soil borings for proposed structures. In general, GEI provided CAMP monitoring and assisted with waste management in accordance with GEI's September 24, 2018. Draft Interim Site Management Plan (ISMP).

The geotechnical borings were logged in accordance with the RIWP, as were the excavations (where feasible). Further discussion of the test pits and borings is provided in Sections 3.4.2 and 3.4.3, respectively.

The geotechnical borings were performed as part of three projects: GPEC LNG Vaporizer Building and Ancillary Structures (2016), GPEC LNG Tanks Ice Shields (2017), and Pig Launcher/Receiver Pad (2018). The borings for these projects are identified as the GPEC-700, 800 and 900 series, respectively.

In areas that were not extensively investigated as part of the RI, analytical samples were collected from select locations and analyzed for the parameters listed in Section 3.4.4. Monitoring wells were also installed at select locations in accordance with the RIWP and as discussed in Section 3.5. The locations of the excavations (GPEC-TP421) and the geotechnical soil borings (GPEC-SB701, GPEC-SB702, GPEC-SB704 through GPEC-SB706, GPEC-SB708, GPEC-SB709, GPEC-SB801 through GPEC-SB804, and GPEC-SB901 through GPEC-SB904) that were logged by GEI, and the monitoring wells (GPEC-MW902, GPEC-MW904, and GPEC-MW905) installed are shown on Figures 12 and 13, respectively.

## 3.14. Site Survey

Each investigation location (soil borings, monitoring and recovery wells, sediment cores, test pits, and surface-soil samples) was surveyed by a New York State Licensed Land Surveyor. The vertical and horizontal position of soil sampling locations and monitoring, and recovery wells were determined to ±0.02 feet. All locations and elevations were referenced to the New York State Plane Eastern Zone (3104) North American Datum 1983 (NAD83) and the North American Vertical Datum (NAVD88).

## 3.15. Community Air Monitoring

In accordance with NYSDEC and NYSDOH requirements, a CAMP was implemented at the Site during each phase of the intrusive field activities. In addition to work zone monitoring, continuous air monitoring stations were located upwind and downwind of each intrusive work area (i.e., boring and test pit locations). VOCs and particulate matter less than 10 micrometers in size (PM-10) were monitored at the up-wind and downwind stations on a continuous basis. Wind direction was determined using a windsock(s) and/or flagging poles installed on-Site.

The following equipment was used for GEI employees' work zone monitoring:

- PID equipped with 10.6 eV lamp
- Dust Meter for PM-10 monitoring
- Combustible Gas Indicator/Oxygen/hydrogen sulfide/hydrogen cyanide meter.

GEI field staff monitored and documented daily Site conditions and operations. If action levels were exceeded, GEI's field representative immediately implemented actions outlined in the Site-specific Health and Safety Plan (HASP) and notified GEI's Project Manager and the Site safety officer.

## 3.16. Investigation-Derived Waste Management

IDW consisting of soil, water, and decontamination supplies generated during investigation activities were containerized in 55-gallon DOT-approved drums, roll-off containers, or fractionation tanks and temporarily stored on a waste storage pad located near GEI's on-Site trailer near Varick Street. Soil IDW generated during the investigation borings and well installations, excluding Phase 1 of the RI, was also added to an active stockpile on the Holder 1 pad that was generated from various capital improvement projects.

After completion of investigation activities, waste characterizations samples of the soil, including the stockpiled soil, and fluid IDW were collected and submitted for laboratory analysis to complete a waste profile for appropriate disposal. The waste characterizations parameters met the criteria outlined by National Grid's approved disposal facility and appropriate off-Site disposal was arranged by National Grid. Copies of all available waste manifests and associated analytical data are included as Appendix K.

## 3.17. Quality Assurance/Quality Control

Field and laboratory QA/QC samples were collected to determine precision and comparability and data quality during field sampling. Duplicate, matrix spike (MS)/matrix spike duplicate (MSD), and equipment rinsate blank samples were collected a frequency of 1 per 20 analytical samples per media. Parent sample names and duplicate names were noted on the appropriate sampling form and in the project field book.

Equipment rinsate blanks were collected from non-disposable equipment used in the collection of samples (i.e. stainless-steel bowls, hand augers, etc.) by pouring de-ionized water over the decontaminated equipment and collecting the rinsate in appropriate sample containers.

One trip blank accompanied each cooler containing samples for VOC analysis and was analyzed for VOCs by USEPA Method 8260B.

QA/QC sampling during the RI, Groundwater Model Investigation, Loading Platform Area Investigation, and the capital improvement projects was conducted in accordance with RIWP and QAPP. Sampling conducted during the PDI was performed in accordance with the approved PDI and supplemental PDI work plans. Sampling conducted during the Emerging Contaminant Groundwater Investigation was performed in accordance with the approved Emerging Contaminant Groundwater Sampling Work Plan.

## 3.18. Data Reduction and Reporting

Laboratory samples were submitted to a NYSDOH ELAP-approved laboratory and the analytical data was provided in an electronic data deliverable format. A New York State Category B data deliverable was provided for 20 percent of the samples collected during the RI, Groundwater Model Investigation, Loading Platform Area Investigation, the capital improvement projects and the 2024/2025 additional groundwater sampling event, and all of the data from the PDI and Emerging Contaminant Groundwater Investigation. Upon receipt, the data was validated in accordance with the *USEPA Region II Functional*

*Guidelines for Evaluating Organic Analyses* (September 2006) and the USEPA Region 2 *Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program,* SOP HW-2, Revision 13 (September 2006), modified as necessary to accommodate the non-Contract Laboratory Program methodologies used.

Data usability summary reports (DUSRs) were prepared for each laboratory data package and identified any quality control non-conformances and the associated impact to the usability of the analytical data. Laboratory reports and DUSRs are provided in Appendix S.

A completeness check was performed on the remainder of the sample data to confirm that the analytical data received was consistent with the chain-of-custody submitted. No review of the Category B package QC results was performed.

# 4. Geologic and Hydrogeologic Characterization

This section documents the geology and hydrogeology beneath the Site based on specific boring and monitoring well data collected during the investigations.

## 4.1. Site Geology

Based on observations from subsurface investigations, the Site geology generally consists of unconsolidated overburden containing fill, marsh deposits, and stream deposits extending approximately 200 feet bgs and underlain by bedrock. The general geologic units identified at the Site include fill, marsh deposits, glacial outwash and Gardiners Clay. Details regarding the general stratigraphy in order of increasing depth are discussed in the following sections. The actual descriptions and thicknesses vary between borings; and soil boring logs are provided in Appendix M.

Geologic cross-sections depicting the general geologic conditions beneath the Site were developed based on the lithologic descriptions recorded in boring and monitoring well logs. The cross-sections are presented on Figures 15 through 18.

### *4.1.1. Fill*

Prior to development of the Site and surrounding areas, the Site was low lying marsh land and fill material was brought onto the property to bring the Site to its existing grade. Thickness of the fill material varies across the Site; however, it is generally observed thickest along Newtown Creek (ranging from approximately 20 to 45 feet thick), in areas within the former creek channel that were filled as part of the Site construction and the thickness of fill decreases with distance from Newtown Creek. Fill material at the Site generally consists of brown, silty sand to widely graded sand, silt and gravel with varying amounts of anthropogenic material (concrete fragments and brick fragments, timber, glass, etc.).

### *4.1.2. Marsh Deposits*

Marsh deposits consisting of peat (meadow mat), silt, and clay have been observed underlying fill material generally along the eastern and southern property boundaries. The extent of these marsh deposits is located within the footprint of the former tidal marsh adjacent to Newtown Creek and English Kills and are presented on Figure 19. In the area along Maspeth Avenue, the deposits primarily consist of a continuous formation of dense peat or meadow mat at a depth of approximately 15 to 20 feet bgs. The peat/meadow mat is only observed in isolated areas along the Loading Platform, where the marsh deposits consist of more silt and clay deposited within the former creek channel and estuarine tributaries. Where present, the marsh deposits layer is observed as a confining unit or aquitard restricting vertical migration of groundwater and contamination. The marsh deposits layer represents the historic surface grade (excluding the areas within the former creek channel) in these areas prior to development and placement of fill at the Site.

General thickness of the marsh deposits per area are described below:

- Along Newtown Creek near the LNG process area, 5 to 20 feet thick (primarily silt and clay).
- Along Newtown Creek near the former MGP process area, 5 to 10 feet thick (silt and clay with some areas of peat/meadow mat).
- Along Maspeth Avenue in the vicinity of, and immediately east of the Transportation Building, 5 to 15 feet thick (meadow mat and silt and clay).
- Along Maspeth Avenue from the central portion of the Transportation Building to the eastern portion of employee parking lot area, marsh deposits were generally not observed.
- Along Maspeth Avenue, from the employee parking lot area west to Vandervoort Avenue, marsh deposits consisting of meadow mat were generally less than 10 feet thick and they were underlain by clay and silt 5 to 55 feet thick.

Areas across the Site with higher potentiometric elevations appear to be associated with increased thickness of the meadow mat layer.

### *4.1.3. Intermediate Sand/Clay*

Glacial outwash is present through the Site underlying the fill material and marsh deposits (where present), with varying thicknesses of 50 to 70 feet thick. The glacial outwash generally consists of interbedded narrowly graded sand and silt beds with occasional gravel and clay lenses. In the southwestern area of the Site along Maspeth Avenue, from Holder 1 to the west, lower permeability units consisting of clays, silts, and sandy/silty clays are more frequently encountered and act as localized confining layers restricting vertical migration. The thickness of this layer, referred to as the intermediate clay, along Maspeth Avenue in this area ranged from approximately 5 to 30 feet. This formation was not present on the western edge of Maspeth Avenue near the intersection of Vandervoort Avenue.

### *4.1.4. Gardiners Clay*

The Gardiners Clay was observed beneath all investigated areas of the Site underlying the glacial outwash. The elevations at which the unit was encountered varied from as deep as approximately El.-115 feet above msl in the central and southern area of the Site along Maspeth Avenue to as shallow as approximately El. -35 feet above msl in the northwestern portions of the Site. The vertical limit of the unit was not determined during the investigation. The Gardiners Clay generally consists of a high plasticity, stiff, green, and gray clay with varying amounts of sand and is considered the main confining unit underlying the Site.

### *4.1.5. Jameco Gravel and Bedrock*

The northern extent of the Jameco Gravel as mapped by Buxton and Shernoff (1999) is approximately 1 mile south of the Site; it was not encountered at the Site. Weathered bedrock was encountered once during the investigations, at a depth of approximately 190 feet bgs in the northeastern portion of the Site. A historical investigation indicates the depth of bedrock at about 132 to 185 feet bgs in the northern part of the Site.

## 4.2. Site Hydrogeology

Two regional aquifers are reportedly present in the area of the Site: The Upper Glacial Aquifer and the Jameco Aquifer. The Upper Glacial Aquifer is unconfined, and includes groundwater within the fill, marsh deposits, and glacial outwash units. Groundwater in the Upper Glacial Aquifer generally flows southwesterly toward New York Harbor but locally converges toward the area of Newtown Creek (USGS, 1997). The Jameco Gravel is a confined or semi-confined aquifer, generally located beneath the Gardiner's Clay. The Site is located about a mile north of the mapped extent of the Jameco Gravel, and the aquifer is not present at the Site.

For purposes of this investigation, the Upper Glacial Aquifer has been subdivided into shallow (0 to 25 feet bgs), intermediate (25 to 60 feet bgs), and deep (below 60 feet bgs) groundwater zones to evaluate the relationships between potentially different flow regimes within the aquifer.

Water level gauging was conducted in December 2012, October 2015, March 2017 and October 2024. Measurements were taken during high tide and low tide conditions in 2012 and 2015 and during mid-tide conditions during March 2017 and October 2024. Gauging data are summarized in Table 4 and the gauging data was used to develop groundwater elevation contours for the shallow, intermediate, and deep aquifer zones as presented on Figures 20 through 31. The contours shown for each interval during the 2012 and 2015 are averages of the high and low tide measurements.

### *4.2.1. Upper Glacial Aquifer – Shallow (Water Table) Zone*

In October 2015, groundwater elevations in the shallow zone across the Site ranged between approximately 1.4 feet to 12.6 feet above msl, while in 2024 they ranged from approximately 0.7 feet to 8.6 feet above msl. As shown on Figures 23, 23, 26 and 29, groundwater flow in the shallow Upper Glacial Aquifer is affected by the presence of the marsh deposits on the southern and eastern portion of the Site. Groundwater generally flows north off the meadow mat layer towards the central portion of the Site; however, in the southeastern portion of the Site some localized influence to the southeast is observed in a small area where the marsh deposits are not continuous. Tidal influence is noted in areas adjacent to the Loading Platform. In the interior portions of the Site, the groundwater contours are relatively flat.

Hydraulic conductivity values for the shallow zone were determined through slug tests performed at GPEC-MW-2S, GPEC-GT-3, GPEC-4S, GPEC-MW-2, GPEC-MW-9, and GPEC-MW222S. The data from each location was used to calculate hydraulic conductivity for each well using the Bouwer-Rice equation and the calculated hydraulic conductivities are presented in Table 65. Hydraulic conductivities ranged from 0.024 feet per day (ft/day) at GPEC-GT-3 to 175 ft/day at GPEC-MW-9. The wide range in values is expected within the shallow zone fill unit, where the conditions are most variable. The screened material in GPEC-GT-3 generally consisted of finer grained material than what was observed at other slug test locations in the shallow zone. The majority of the hydraulic conductivities in the Upper Glacial Aquifer were calculated greater than 6 ft/day. The hydraulic conductivity at GPEC-MW9 was an order of magnitude higher than any other values calculated at the Site and is likely due to GPEC-MW9 being screened within a sand and gravel zone not typically found in other areas of the Site.

Horizontal gradients using 2015 and 2024 data were calculated at select locations across the Site based on groundwater flow directions and are presented in Table 76. Calculated horizontal gradients were generally higher on the southeastern portion of the Site with the highest horizontal gradient calculated of approximately 0.002 feet per foot (ft/ft) from GPEC-MW344S to GPEC-MW221S. The lowest horizontal gradient was calculated at 0.0004 ft/ft from GPEC-PZ322 to W-2 located on the south-central portion of the property.

Using the calculated hydraulic gradients across the Site (excluding GPEC-MW9), the Site-wide shallow zone average hydraulic conductivity (7.5 ft/day), and an estimated effective porosity of 0.28, the groundwater seepage velocity was calculated using a form of the Darcy equation:

v=Ki/n_e

Where:

v = groundwater flow velocity

K = hydraulic conductivity

i = horizontal hydraulic gradient

ne = effective porosity

The calculated hydraulic conductivity value of 175 ft/day at GPEC-MW9 was excluded as anomalous result. The hydraulic conductivity values within this well are influenced by the secondary containment berm for LNG Tank 2 located in the area. Furthermore, the soil within the screened zone of this well does not reflect natural conditions at the Site.

During the October 2015 field event, calculated groundwater seepage velocities range from 0.04 ft/day in the southwestern portion of the Site to 0.01 ft/day in the southern portion of the Site with an average Site-wide shallow zone groundwater seepage velocity of 0.02 ft/day. Shallow zone seepage velocities were similar in 2024 ranging from 0.05 ft/day to 0.01 ft/day.

### *4.2.2. Upper Glacial Aquifer – Intermediate Zone*

In October 2015, groundwater elevations across the Site ranged between approximately -2.6 feet to 4.5 feet above msl, while in 2024 they ranged from approximately 0.3 feet to 3.6 feet above msl. As shown on Figures 21, 24, 27 and 30 groundwater flow in the intermediate Upper Glacial Aquifer is relatively flat across the Site with flow to the south and southeast in the southeast corner of the Site. Tidal influence is also noted in areas adjacent to the Loading Platform. Minor mounding of the groundwater table along the Newtown Creek Loading Platform is noted on the northern portion of the Site.

Hydraulic conductivity values for the intermediate zone were determined through slug tests performed at GPEC-MW4D, GPEC-GT4D, GPEC-GT10D, GPEC-MW3S, GPEC-MW-5S, GPEC-MW103, GPEC-MW328I, and GPEC-MW-333I. The data from each location was used to calculate hydraulic conductivity for each

well using the Hvorslev Method and the calculated hydraulic conductivities are presented in Table 65. Hydraulic conductivities ranged from 7.2x10-3 ft/day at GPEC-MW328I to 52.3 ft/day at GPEC-MW-4D. The intermediate zone hydraulic conductivities are generally less than were calculated in the shallow zone and consistent with the finer grained materials that were observed in this portion of the aquifer.

Horizontal gradients were calculated at select locations across the Site based on groundwater flow directions and are presented in Table 76. Calculated horizontal gradients were not calculated for the northern portion of the Site; however, horizontal gradients along the southern portion of the Site were calculated between 0.0004 ft/ft and 0.001 ft/ft at two locations using 2015 data. Similar values were also identified during the 2024 event.

Using the calculated hydraulic gradients across the Site, the Site-wide intermediate zone average hydraulic conductivity (14.28 ft/day), and an estimated effective porosity of 0.20, the groundwater seepage velocity was calculated using a form of the Darcy equation as described in Section 4.2.1. During the October 2015 field event, calculated groundwater seepage velocities in the intermediate zone varied from 0.03 ft/day in the southeastern portions of the Site to 0.08 ft/day in the southcentral portions of the site. The calculated seepage velocities in 2025 in these areas varied from 0.09 ft/day to 0.11 ft/day, respectively.

### *4.2.3. Upper Glacial Aquifer – Deep Zone*

Groundwater elevations across the Site in 2015 in the deep Upper Glacial Aquifer ranged between approximately 1.3 feet to 2.8 feet above msl while in 2024 they ranged from approximately -1.7 feet to 4.3 feet above msl. As shown on Figure 22, 25, 28 and 31 groundwater flow in the deep Upper Glacial Aquifer is generally flat across the Site with flow generally to the east toward Newtown Creek.

Horizontal gradients were calculated at select locations across the Site based on groundwater flow directions and are presented in Table 7. Calculated horizontal gradients were calculated across the Site and ranged between 2.94x10-4 ft/ft (2015) to 3.46x10-4 ft/ft (2024) on the western portion of the Site and from 3.29x10-4 ft/ft in 2015 to 6.02x10-4 ft/ft in 2024 on the central-eastern portion of the Site.

Slug tests were not performed in wells screened within the deeper zone of the Upper Glacial Aquifer, therefore, hydraulic conductivities and groundwater seepage velocities within the deep aquifer zone could not be determined.

### *4.2.4. Vertical Head Potentials*

In addition to the horizontal gradients across the Site, hydraulic vertical gradients were calculated using gauging data collected from 205 and 2024 for nested well pairs. The calculated vertical hydraulic gradients are summarized in Table 87. In general, downward gradients were observed from the shallow to intermediate zone of the Upper Glacial Aquifer Zone with an average calculated vertical gradients of 0.099 ft/ft (2015) and 0.069 ft/ft (2024); however, slight upward gradients were measured at GPEC-MW3S/3D and GPEC-MW5S/5D well pairs in both events and GPEC-MW101WT/I in 2024. Calculated vertical hydraulic gradients from the intermediate to deep Upper Glacial Aquifer Zone were calculated and generally lower downward gradients were observed with a Site-wide average of

0.006 ft/ft in both events. Upward gradients were measured at four intermediate/deep well pairs in the southwestern portion of the Site with gradients ranging from -0.001 ft/ft in GPEC-MW220 in 2015 and GPEC-MW221 in both events to -0.016 ft/ft in 2015 and -0.019 ft/ft in 2024 at GPEC-MW328.

Vertical hydraulic gradients were calculated with greater fluctuation throughout the Site between well pairs screened within the shallow and intermediate aquifer zones. The highest vertical gradients generally correspond to well pairs that are installed outside of the marsh deposit area. The vertical hydraulic gradients calculated between well pairs screened within the intermediate and deeper Upper Glacier Aquifer are relatively consistent across the Site and suggest that these zones are in equilibrium with each other.

## 4.3. Groundwater Model Results

GEI developed and ran the numerical groundwater flow model introduced in Section 3.12.2, to refine the conceptual understanding of groundwater flow and the effect of aquifer properties of the Site and surrounding influences (utility infiltration, Newtown Creek, English Kills, bulkhead/shoreline conditions, and groundwater extraction) on flow. The model is documented in detail in Appendix D. Results as summarized in this Section are presented in Appendix D, referring specifically to Table L5 and Figures L5-1 and L5-2.

Model output was evaluated using computed potentiometric contours, particle tracking, and Zone Budget flow rate calculations. Particle tracks were used to evaluate flow paths toward potential receptor locations. Zone Budget is a post-processing feature used to compute volumetric flow rates across user-defined horizontal and/or vertical planes in the model, based on the computed flow field.

Figures L5-1 and L5-2 show the computed potentiometric contours and particle paths for Layers 1 and 4 which represent the water table and intermediate-zone Upper Glacial Aquifer (UGA), respectively. On Figure L5-1, computed shallow groundwater elevations are highest in the northeast and southwest areas of GPEC. In the northeast, the high elevations are associated with water retention in dense moraine material. In the southwest, the marsh deposits impede drainage of recharge in the fill, resulting in water table mounding above the marsh deposits. Groundwater flow occurs laterally above the marsh deposits, until connecting hydraulically with the UGA where the marsh deposits are absent. Particle paths depict this pattern on Figure L5-1. The model shows that shallow groundwater flowing off-property flows northward to the ExxonMobil extraction system; easterly toward Newtown Creek (discharging through or beneath the pervious Loading Platform support), and southerly toward English Kills. Groundwater divides, where flow splits between the three principle off-Site flow directions, can be inferred in central areas of GPEC from the particle paths. Some shallow groundwater is captured by the Maspeth Avenue utilities. Although some particle tracks terminate along Maspeth Avenue, some shallow groundwater may bypass the utilities.

On Figure L5-2, the computed heads in the UGA within GPEC are in the 1.0 to 2.0 ft elevation range. Computed flow directions are similar to those described for the shallow zone (except for mounded water above marsh deposits), where on-property flow splits toward the northern, eastern, and southern property boundaries.

The results of the Zone Budget flow analysis are presented in Section II of Table L5.

# 5. Nature and Extent of Impacts

This section discusses the surface soil and subsurface field observations, and chemical constituents detected during the investigations at the Site. The nature and extent of impacts will be discussed by area, with the exception of the SVI investigation. These areas include the Loading Platform Area (Areas 1 and 2) located adjacent to Newtown Creek, the Maspeth Alignment (Areas 4 and 5) located along Maspeth Avenue from Vandervoort Avenue to the southeastern corner of the Loading Platform Area, and the remaining interior portions of the Site (Site Interior – Areas 3, and 6 through 9), as shown on Figure 2. These areas are shown along with the sample locations corresponding to the investigation phase on Figures 9 through 12. The SVI sample locations are shown on Figure 14.

The subsurface soil and groundwater findings are further divided into three depth zones: shallow, intermediate, and deep as described below. The subsurface soil shallow, intermediate, and deep zones are roughly defined as 0 to 25 feet bgs (excluding surficial soil less than 1 foot), 25 to 60 feet bgs, and greater than 60 feet bgs, respectively. The groundwater depth zones are based on the elevation of the midpoint of the well screen due to the varying topography of the Site. The groundwater shallow, intermediate, and deep zones are roughly defined as less than El. -20 feet above msl, El. -20 to -50 feet above msl, and greater than El. -50 feet above msl, respectively.

Details of the methods and terminology used for the subsurface field observations are discussed in Section 5.1. Also included in Section 5.1 is a discussion of the analytical methods and regulatory guidance comparisons utilized. The observations and results from the Loading Platform Area, Maspeth Alignment, and Site Interior are presented in Sections 5.2, 5.3, and 5.4, respectively. The results from the SVI investigation are presented in Section 5.5.

The current groundwater monitoring well network is largely comprised of wells and piezometers installed during the investigations; however, pre-existing wells located on-Site have been used for groundwater elevation measurements and sampling. The piezometers were installed strictly for groundwater elevation measurements.

## 5.1. Identification of Environmental Impacts

### *5.1.1. Physical Observations and Descriptions of Contaminated Soil*

The following terminology and descriptions were used to describe the visual and olfactory observations of soil contamination made during the field investigations. These terms are also used throughout the report to describe the nature of contamination if and where it was observed in soil.

**Saturated**: the entirety of the pore space of the soil matrix for a given soil sample appears to be filled with a NAPL. The characteristics of the observed NAPL were used in the description (i.e., NAPL-saturated or petroleum-saturated).

**Coated**: soil grains are coated with NAPL but there is not sufficient NAPL present to saturate the pore spaces. The characteristics of the observed NAPL were used in the description (i.e., NAPL-coated or petroleum-coated).

**Blebs**: visually observed discrete sphericals or pockets of NAPL within a soil sample. The majority of the soil matrix did not exhibit the presence of NAPL beyond these discrete blebs. The characteristics of the observed NAPL were used in the description (i.e., NAPL blebs or petroleum blebs).

**Solid NAPL**: NAPL that is in a solid or semi-solid phase. Typically noted as discrete granules or a solid layer.

**Sheen**: iridescence was visually observed within a soil sample. Sheens are typically noted in moist to wet soils.

**Stained**: the soil sample exhibited a discoloration not associated with natural processes. The color of the observed stain was used and if the characteristics of the staining material were discernible, they were noted (i.e., NAPL-stained or petroleum-stained).

**Odor**: if an odor was detected, it was described based on its relative intensity and characteristics. Modifier terms such as strong, moderate, and slight were used to describe relative odor intensity. Descriptive terms such as naphthalene-like or petroleum-like odors were also used.

NAPL that is visually observed to be in saturated state can be described as potentially mobile, while residual NAPL (coating, blebs, solid NAPL or sheen) does not have the potential to migrate, which is further discussed in Section 8.2.1.

Visual observations made during the test pit excavations and the advancement of soil borings were recorded and are presented on the test pit and boring logs included in Appendices I and J, respectively. Physical impacts in soil for the greatest apparent degree of observed impact within each interval (shallow, intermediate, and deep) are shown on each of the soil analytical summary figures (Plates 3 through 11). Physical impacts are also shown on geologic cross sections A-A' through D-D' on Figures 15 through 18. For the discussion of physical impacts in soil in Sections 5.2, 5.3, and 5.4, the greatest apparent degree of observed impact within each interval is discussed while lesser impacts above and/or below the greatest apparent degree of observed impact are generally not discussed.

### *5.1.2. Analytical Results and Comparisons*

The analytical results of the surface soil samples collected are presented in Table 9. The subsurface soil and groundwater samples are presented for the Loading Platform Area, Maspeth Alignment, and the Site Interior in Tables 10 through 12 (soil) and Tables 14 through 16 (groundwater), respectively. Table 13 provides typical background concentrations of metals for the Eastern United States (Shacklette and Boerngen, 1984). It is noted that the background concentrations are used to help determine whether the detected concentrations in soil may be Site related, naturally occurring, or typical of regional levels for a particular compound and are not intended to be used to influence remedy selection. The SVI samples are presented in Table 17. Forensic analysis results from select Phase 1 soil sample locations and NAPL from GPEC-MW01R and GPEC-MW205 are presented in Tables 18 and 19, respectively.

Soil samples were compared to NYSDEC's Division of Environmental Remediation's Subpart 375-6 of the New York State Code of Rules and Regulations (NYCRR) Restricted Use – Industrial Soil Cleanup Objectives (SCOs) and the Protection of Groundwater SCOs (NYSDEC, 2006), excluding surface soil samples collected from the public ballfield area of the Site. The surface soil samples from the public ballfield area were compared to the Restricted Residential Use SCOs at the request of NYSDEC due to its historical use as a recreational area, which is no longer the case. In the remaining report text these standards are referred to as the IUSCOs, PGWSCOs and the RRSCOs.

The IUSCOs apply to sites used primarily for the purpose of manufacturing, production, fabrication or assembly processes and ancillary services. Industrial use does not include any recreational component. The Industrial Use SCOs are the least stringent standards published by NYSDEC. However, they are most appropriate for evaluating the significance of Site impacts because they reflect the industrial/ manufacturing zoning, as well as actual Site use. As such, the IUSCOs are the primary SCOs discussed within the remaining report sections. The PGWSCOs are applicable since groundwater data exceeds the New York State Ambient Groundwater Quality Standards (AGWQS) and guidance values for Class GA (groundwater) for contaminants found in soil.

Groundwater samples were compared to the AGWQS as presented in the NYSDEC's Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, dated June 1998. Groundwater samples collected during the Emerging Contaminant Groundwater Investigation were previously compared to drinking water and groundwater screening levels provided by the NYSDEC to National Grid in a letter dated August 20, 2018. Data collected from this supplemental investigation is included in Appendix F. Current emerging contaminant data are compared to the NYSDEC human health criteria for PFOA and PFOS as provided in the April 2023 NYSDEC document titled " Sampling, Analysis, and Assessment of Per- And Polyfluoroalkyl Substances (PFAS)".

A statistical analysis of exceedances of the applicable criteria for surface, subsurface soil and groundwater by Area is provided in Table 20.

Sediment sample results from samples collected during the PDI are presented in Table 21.

BTEX and PAHs, subsets of VOCs and SVOCs, respectively, are commonly associated with MGP by-products and were the main focus of the investigation; however, these compounds are also found in a variety of petroleum-related products associated with the other industrial/ manufacturing sources that have been identified in the RI Study Area. Subsurface soil analytical summaries showing exceedances of the IUSCOs and PGWSCOs for from each depth zone are presented on Plates 3 through 11. Based on the number of samples collected, the analytical summaries are only included for those locations with an exceedance of the IUSCOs or PGWSCOs for any individual compound.

For discussion in areas where there were numerous PAH exceedances, a value of 500 mg/Kg was used to identify areas with higher level exceedances. The 500 mg/Kg value is applicable for non-residential use sites (i.e., commercial or industrial use sites) as a soil cleanup level for total PAHs for all subsurface soil with NYSDEC approval. The 500 mg/Kg soil cleanup level is applied in lieu of achieving all of the PAH-specific SCOs in Title 6 NYCRR 375-6. A 500 mg/Kg contour for total PAHs has been added to the soil

figures, where appropriate. Due to the limited number of BTEX exceedances relative to PAHs, a BTEX contour was not included on the figures. In order to provide a similar summary for groundwater concentrations, a 100 micrograms per liter (µg/L) contour for BTEX, total PAHs and CVOCs has been added to the figures, where appropriate.

The discussion of the groundwater results has been divided into two sections (PDI and RI phases and 2024/2025 additional groundwater sampling phase) in each area and depth zone due to the significant amount of time between the end of the RI groundwater sampling phase and the 2024/2025 additional groundwater sampling phase. Groundwater exceedances for individual compounds during the RI and PDI phases, along with total BTEX, total PAH and total CVOC concentrations are shown for the three depth zones on Plates 13, 14 and 15, respectively. The data for the 2024/2025 additional groundwater sampling event are similarly presented on Plates 16 through 18.

Analytical summaries for detections and exceedances of PCBs are shown on Figures 32 and 33 for soil and groundwater, respectively. In general, PCB detections in soil and groundwater were limited, and none of the soil samples exceeded the IUSCO for total PCBs of 25 mg/Kg. Exceedances of the UUSCO (0.1 mg/Kg) and AGWQS (0.09 µg/L) were identified in 28 out of 637 soil samples and three out of 238 groundwater samples (collected from 97 wells) collected during the RI, respectively. Based on the number of samples collected, the total PCB concentration is only included for those locations with an exceedance of the UUSCO (0.1 mg/Kg) on Figure 32.

Other synthetic chemicals, primarily chlorinated solvents typically associated with non-MGP sources, were detected in on-Site groundwater. CVOCs detected above the AGWQS included PCE, TCE, and their breakdown products: cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and vinyl chloride, as well as 1,1-dichloroethene (1,1-DCE), 1,1-DCA, and 1,2-dichloroethane (1,2DCA). Previously documented PCE and TCE plumes are known to be present off-Site along the northern and western property boundaries as shown in Appendix J (Meeker Avenue Plume Superfund Site). In addition to BTEX and PAHs, these CVOCs are included on the groundwater analytical summary figures. BTEX and PAHs in soil and BTEX, PAHs and CVOCs in groundwater are referred to as “targeted compounds” in the discussion below.

A surface soil analytical summary for all compounds exceeding IUSCOs and PGWSCOs is presented on Plate 12. The values are shaded on the plate if the compound exceeds its respective IUSCO or PGWSCO.

Concentrations of metals in soil are also compared to the typical background concentrations of metals for the Eastern United States (Shacklette and Boerngen, 1984), where appropriate. The background comparison is solely used to determine if the concentrations in soil may be Site related, naturally occurring, or typical of regional levels for a particular compound.

The co-located SS and IA samples were compared to the SV/IA Matrices (NYSDOH matrices) within the SVI Guidance. The IA concentrations were also compared to the NYSDOH Air Guideline Values (AGVs) and the USEPA Building Assessment and Survey Evaluation (BASE) Study (90th percentile) levels, as provided in Table C2 of the SVI Guidance. The USEPA BASE Study included IA quality studies from public and commercial office buildings across the United States. As such, it provides an appropriate frame of

reference for the IA concentrations detected at the Site. Any significant SS or IA detections of potentially MGP-related or petroleum-related compounds were also identified.

Appendix S presents the DUSRs. An electronic version of the chain-of-custody forms, data validation reports, and the validated laboratory Form I reports are also presented in Appendix S.

## 5.2. Loading Platform Area

Areas 1 and 2 are located immediately adjacent to Newtown Creek and are identified as the "Loading Platform Area". This area was investigated during Phases 1 and 3 of the RI, PDI, Groundwater Model Investigation, Loading Platform Area Investigation, and Emerging Contaminant Groundwater Investigation. The Site boundary is located on the landward side of the Loading Platform, which is a pile-supported structure, extending approximately 42 feet inland from its water-facing edge with a large rip rap wedge surrounding its terminal landside edge. The Loading Platform supported coal and coke storage and facilitated loading and offloading of these materials from vessels on Newtown Creek.

The current and historical uses of these areas are summarized as follows:

Area 1 is located at the southeast corner of the Site adjacent to and inland of the Newtown Creek Loading Platform and is currently comprised of the southern portion of the Loading Platform, road, parking areas, two small buildings, and a portion of the Stores Building. Historically, Area 1 was an open yard between the coke by-product plant and the pier line where coal and coke freighters docked. The closest historical structures include the tar storage tanks on the northeast side of the former by-products building and the former light oil plant. These tanks existed for about 30 years until they were removed with the by-product building in 1957. Also nearby are an underground gasoline (1- 10,000 gal) tank and a diesel tank (1- 10,000 gal) that are currently in use and located on the south and east side of the Transportation Building. These tanks were replaced in 2017. Information on the project is included in Appendix I.

Area 2 includes the portion of land north of Area 1 from the Loading Platform extending inland approximately 150 feet and northward to the north end of the Site near Lombardy Street. Currently, this area is comprised of the northern portion of the Loading Platform, road, a storage yard, and the eastern edge of the LNG facility including the eastern portion of the LNG Tank 1. Historically, much of this area was part of the Newtown Creek main channel before it was filled in 1928 just after the construction of the Koppers gas plant. As the gas works became operational, this area was used primarily for coal and ash storage. In 1946 a barge loading facility was built at the northern end of the pier line just south of Lombardy Street. The location of the historical MGP-infrastructure is shown on Plate 1.

### *5.2.1. Surface Soils*

A total of three surface soil samples were collected within Area 2 during Phase 3 of the RI. Exceedances were limited to benzo(a)pyrene in one sample. Benzo(a)pyrene exceeded the IUSCO of 1.1 mg/Kg in the GPEC-SS301 sample with a concentration of 5.59 mg/Kg. This sample was collected in the vegetated area northeast of the LNG Tank 1.

## *5.2.2. Subsurface Soils*

The subsurface soil analytical results for the Loading Platform Area are presented in Table 10. Soil exceedances for the targeted compounds along with field observations of impacts are shown for the three depth zones on Plates 3, 10, and 11 respectively. Cross-section A-A' (Figure 15) was developed to illustrate the geology and show the identified impacts underlying the Loading Platform Area, just inboard of the Loading Platform structure. Boring GPEC-SB213, located just to the west of Area 2, is included in the Loading Platform Area discussion since the boring was intended to investigate impacts within this area.

### 5.2.2.1. Shallow (0 to 25 feet bgs)

Physical impacts in the shallow zone in the Loading Platform Area were found sporadically throughout; however, no visual observations of potentially DNAPL-saturated areas were identified and NAPL coating was only identified in one boring. Elevated (>500 mg/Kg) concentrations of total PAHs were limited to three relatively small regions in the southern, central, and northern portions of the Loading Platform Area (Plate 3).

#### *Field Observations*

A total of 50 borings and 15 test pits were advanced in the shallow zone in the Loading Platform Area. An additional nine geotechnical borings (GT-series) were advanced where CPTs were performed. No visual observations of potentially DNAPL-saturated zones were identified within the shallow zone of the Loading Platform Area in the 50 borings and 15 test pits that were advanced. Residual NAPL impacts (blebs, sheen, or coating) in the shallow zone in the Loading Platform Area were identified in 14 of the 50 borings. NAPL coating was identified in the 7- to 25-foot interval in GPEC-SB216, located near the northern border of the Site. NAPL blebs and a sheen were noted in the 10- to 20-foot interval of GPEC-MW406 and NAPL blebs were noted in the 15- to 20-foot interval of GPEC-SB105. Sheen was visually observed in 11 of the 50 borings: GPEC-GT10D (22 to 24 feet bgs), GPEC-MW1D (17 to 25 feet bgs), GPEC-MW410 (20 to 25 feet bgs), GPEC-RW409 (10 to 20 feet bgs), GPEC-SB01B (24 to 25 feet bgs), GPEC-SB03S (10 to 12 feet bgs), GPEC-SB05C (12 to 14 feet bgs), GPEC-SB103 (15 to 20 feet bgs), GPEC-SB404A (19.3 to 20 feet bgs), GPEC-SB405A (15 to 25 feet bgs), and GPEC-SB408A (23.4 to 25 feet bgs). Lesser impacts (staining or odors) were identified in 10 other borings (out of 50 borings advanced in the area). No residual NAPL impacts were noted in the 15 test pits advanced in the area. No historic structures were located along that could be a potential NAPL source area were located within the vicinity of Loading Platform Area.

Petroleum-related impacts (blebs, sheens, staining, or odors) were identified in six of the 50 borings and one of the 15 test pits. Petroleum blebs and a sheen were noted in the 20 to 25-foot interval of GPEC-SB407A. A petroleum-related sheen was visually observed in four of the 50 borings: GPEC-MW5D2 (7 to 25 feet bgs), GPEC-SB01 (14 to 19.3 feet bgs), GPEC-SB02 (24 to 25 feet bgs), and GPEC-SB406A (10 to 15 and 20 to 23.9 feet bgs). Petroleum-related staining was noted in the 7- to 17-foot interval in GPEC-SB204 and a petroleum-like odor was noted in the 5- to 5.5-foot interval in GPEC-TP203.

Impacts noted above at the 25 feet bgs interval generally continued into the intermediate zone.

Sulfur-like odors were noted in two of the 50 borings in the 17.7- to 20-foot interval in GPEC-SB202 and the 7- to 17-foot interval in GPEC-SB206.

### *Analytical Summary*

A total of 43 samples were collected from the shallow soil zone within the Loading Platform Area during the PDI and Phase 1 of the RI. The samples were taken from borings and test pits. Exceedances of the IUSCOs for targeted compounds were limited to PAHs and included all of the 17 PAH compounds for which standards have been established except acenaphthene and benzo(g,h,i)perylene. A total of 19 (from 18 locations) of the 43 samples collected exceeded the IUSCOs for at least one PAH compound. PAH concentrations were identified throughout the Loading Platform Area and ranged from ND in three samples to 67,350 mg/Kg in the 3- to 4-foot interval of GPECGT23(CPT). No corresponding physical impacts in the 3- to 4-foot interval of GPECGT23(CPT) were observed. Other locations with elevated PAH impacts (>500 mg/Kg) included the 1- to 2-foot intervals of GPEC-SB204 (2,473.9 mg/Kg), which is located near GPEC-GT23(CPT), and GPEC-SB212 (10,442.8 mg/Kg), and the 7- to 8-foot interval of GPECSB216 (1,172.2 mg/Kg), as shown on Plate 3. Fill was noted in the sampling intervals of GPEC-SB204 and GPEC-SB212 and was likely present in the same interval of GPEC-GT23(CPT). NAPL coating was visually observed in the sampling interval at GPEC-SB216, as described above.

Other SVOC exceedances were limited to an estimated detection of dibenzofuran of 2,900 mg/Kg in the 3- to 4-foot interval of GPEC-GT23(CPT). The IUSCO for dibenzofuran is 1,000 mg/Kg.

Metals exceedances were limited to arsenic, cadmium, and mercury. Exceedances of cadmium and mercury were limited to one sample each, the 7- to 8-foot interval of GPEC-SB214 (62.9 mg/Kg) and the 5.5- to 6-foot interval of GPEC-SB04 (7.4 mg/Kg), respectively. Six samples, one of which only exceeded IUSCOs in the duplicate sample and not in the parent sample, exceeded the IUSCO for arsenic, which were generally found throughout the area. The maximum concentration of arsenic was 63.6 mg/Kg from the 7- to 8-foot interval of GPEC-SB214. All remained within the same order of magnitude of the respective IUSCO. The arsenic concentrations exceeding the IUSCO were within typical background concentrations in soil in the eastern United States (Table 13). Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface.

Detections of free cyanide were limited to three samples reaching a maximum concentration of 0.976 mg/Kg (estimated) in the sample collected from 6- to 7-feet bgs at GPEC-SB205.

No detections of other VOCs, PCBs, pesticides, or herbicides were above their respective IUSCO.

## 5.2.2.2. Intermediate (25 to 60 feet bgs)

Physical impacts in the intermediate zone in the Loading Platform Area were primarily isolated to Area 1 and the southern portion of Area 2. These areas are in the vicinity of one well (GPEC-MW01) with identified DNAPL at the bottom of the intermediate zone, referred to as the MW-01 area (Section 5.2.3), and one recovery well (GPEC-RW409) where potential NAPL-saturation was visually observed in the associated soil boring. Elevated (>500 mg/Kg) concentrations of total PAHs were also limited to these areas (Plate 10) as discussed below.

### *Field Observations*

A total of 52 borings were advanced in the intermediate zone in the Loading Platform Area. An additional eight geotechnical borings (GT- series) were advanced where CPTs were performed. Visual observations of potential DNAPL saturation in soil in the intermediate zone was limited to four of the 52 borings, including the 32- to 33.3-foot interval in boring GPEC-SB05C, the 52- to 54-foot interval of GPEC-SB01B, and the 30- to ~37-foot interval of GPEC-MW409 and GPEC-RW409. Mobile DNAPL has accumulated at thicknesses of up to approximately 7 feet (April 2016) in monitoring well GPEC-MW01R, screened within the intermediate zone. Approximately 152 gallons of DNAPL have been recovered from GPEC-MW01R since 2012 (Table 5). Routine gauging of this monitoring well began in 2015, with recovery conducted as the measured DNAPL thickness approaches the sump length of the well. Further discussion of NAPL occurrence in monitoring wells in the area is provided in Section 5.2.4.

Residual NAPL impacts in the intermediate zone in the Loading Platform Area were identified in 20 of the 52 borings. NAPL coating was identified in the 34.7- to 37.5-foot interval of GPEC-MW407, the 28.5- to 34.5-foot interval of GPEC-SB206, the 32.7- to 35.5-foot interval of GPEC-SB414, and the 30- to 34.9-foot interval of GPEC-SB417. NAPL-coated intervals along with blebs of NAPL were identified from 30 to 32.8 feet in GPEC-MW410 and from approximately 49 to 60 feet in GPEC-SB103. Visual observations of potentially DNAPL-saturated lenses were identified between 55 and 60 feet in adjacent boring GPEC-SB103A. NAPL blebs were visually observed in seven of the 52 borings: GPEC-MW1D (47 to 53 feet bgs), GPEC-MW405 (30 to 35.6 and 40 to 44 feet bgs), GPEC-MW406 (40 to 50 feet bgs), GPEC-SB02 (30 to 30.9 feet bgs), GPEC-SB408A (27.7 to 30 feet bgs), GPEC-SB415 (30 to 33.5 feet bgs), and GPEC-SB416 (30 to 39.5 feet bgs). NAPL blebs were noted in the drilling mud at approximately 34 feet in boring GPEC-SB03. Sheens were noted in five of the 52 borings, including GPEC-SB106, GPEC-SB205, GPEC-SB211, GPEC-SB216, and GPEC-SB405A in the intermediate zone. As noted above, physical impacts in the intermediate zone were primarily isolated to Area 1 and the southern portion of Area 2. Furthermore, many of the residual impacts noted above, were located in a relatively small area, as part of an effort to define the area of saturation identified in GPEC-MW409. Staining or odors were noted in 13 other borings (out of 52 borings) in the area in the intermediate zone. No historic structures were located along that could be a potential NAPL source area were located within the vicinity of Loading Platform Area.

Petroleum-related impacts (sheens, staining or odors) were identified in 10 of the 52 borings. A petroleum-related sheen was visually observed in the 25- to 32-foot interval of boring GPEC-MW5D2, the 25- to 35-foot interval of GPEC-SB406A, the 30- to 37-foot interval of GPEC-SB210, and the 26- to 28.3-foot interval of GPEC-SB03. These impacts were above the NAPL blebs that were noted in the drilling mud in this boring at approximately 34 feet bgs. Petroleum-related staining or odors were identified in the intermediate zone in borings GPE-MW2D2, GPEC-SB203, GPEC-SB208, GPEC-SB212, GPEC-SB214, GPEC-SB215, and GPEC-SB407A.

### *Analytical Summary*

A total of 24 samples were collected from the intermediate zone within the Loading Platform Area during the PDI and Phase 1 of the RI. Similar to the shallow zone, exceedances of the targeted compounds were

limited to PAHs. A total of 16 (from 16 locations) of the 24 samples collected exceeded the IUSCOs for at least one PAH compound.

PAH concentrations ranged from ND in two samples to 7,747.03 mg/Kg in the 39- to 40-foot interval of GPEC-SB105. Impacts noted in this interval were limited to tar-like and creosote-like odors. Exceedances were identified throughout the Loading Platform Area. Elevated PAH impacts (>500 mg/Kg) were primarily located in the southern portion of the Loading Platform Area (Plate 10). Other elevated PAH impacts were identified in the 52- to 54-foot interval of GPEC-SB01B (1,931.3 mg/Kg), the 30- to 32-foot interval of GPEC-SB206 (2,466.34 mg/Kg) and the 34- to 36-foot interval of GPEC-SB03 (561.2 mg/Kg). The samples from GPEC-SB01B, GPEC-SB206, and GPEC-SB03 were collected from the intervals containing physical impacts described above, including the visual observations of potential NAPL saturation in GPECSB01B. PAH compounds exceeding the IUSCOs primarily included the compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene.

Metals exceedances were limited to arsenic in 13 samples, one of which only exceeded in the duplicate sample and not in the parent sample. The arsenic exceedances reached a maximum concentration of 229 mg/Kg in the 30- to 32-foot interval from GPEC-SB206. Several of the arsenic exceedances were above the typical background concentrations in soil in the eastern United States but remained within one order of magnitude of the IUSCO (16 mg/Kg). Arsenic may be related to urban fill or former coal heating operations. Metals below the shallow fill zone are unlikely to be related to historical Site operations.

No detections of other VOCs, SVOCS or PCBs were above their respective IUSCO. Free cyanide was not detected in any of the samples collected.

#### 5.2.2.3. Deep (>60 feet bgs)

Similar to the intermediate zone, physical impacts in the deep zone in the Loading Platform Area were primarily isolated to Area 1 and the southern portion of Area 2. Elevated (>500 mg/Kg) concentrations of total PAHs were also limited to this area (Plate 11).

##### *Field Observations*

A total of 33 borings were advanced in the deep zone in the Loading Platform Area. An additional seven geotechnical borings (GT-series) were advanced where CPTs were performed. More areas of potential NAPL saturation in the Loading Platform Area were identified within the deep zone (four), than in either the shallow (zero) or intermediate zones (three). Moreover, visual observations of potential NAPL saturation in the upper portion of the intermediate zone was limited to the GPEC-MW/RW409 area. Visual observations of potential NAPL saturation was identified in four of the 33 borings in the area: GPEC-SB03 (102 to 103.9 feet bgs), GPEC-SB105 (77 to 80 feet and 88.7 to 90 feet bgs), GPEC-SB205 (68 to 69 feet bgs), and GPEC-SB207 (~76 to 77 feet bgs). All of these borings are located relatively close together in the southern portion of the Loading Platform Area.

DNAPL has accumulated at a thickness of up to 3 feet (March 2025) and 7 feet (October 2012) in monitoring wells GPEC-MW3D and GPEC-MW205, respectively, which are screened within the deep

zone. Approximately 58 gallons of DNAPL have been recovered from GPEC-MW205 since 2012 (Table 5). Routine gauging of this monitoring well began in 2015, with recovery conducted as the measured DNAPL thickness approaches the sump length of the well. DNAPL recovery at GPEC-MW-3D began in March 2025. The recovery schedule will be re-evaluated following additional recovery events. Further discussion of NAPL occurrence in monitoring wells in the area is provided in Section 5.2.4.

Residual NAPL impacts were noted in seven of the 33 borings. NAPL coatings were visually observed in the 70- to 71.2-foot interval of GPEC-SB103 and the 102- to 103.4-foot interval in GPEC-SB106. NAPL-coated intervals were noted from 65.6 to 69.7 feet in GPEC-MW407. NAPL blebs were noted in the 67- to 71.8-foot interval of GPEC-SB206 and at 68 feet bgs in GPEC-MW1D. Sheen was noted in the 88- to 90-foot interval of GPEC-SB01B and the 76- to 78-foot interval of GPEC-SB02. Lesser impacts (staining or odors) were noted in three other borings (out of 33 borings) in the area in the deep zone. No historic structures that could be a potential NAPL source area were located within the vicinity of Loading Platform Area. No petroleum-related impacts were noted in the borings in the deep zone.

### *Analytical Summary*

A total of 33 samples were collected from the deep zone within the Loading Platform Area during the PDI and Phase 1 of the investigation. Exceedances of the targeted compounds were limited to PAHs, as with the shallow and intermediate zones. A total of eight (from six locations) of the 33 samples collected exceeded the IUSCOs for at least one PAH compound.

PAH concentrations ranged from ND in 13 samples to 16,046.6 mg/Kg in the 75.5- to 77-foot interval of GPEC-SB207. Physical impacts in this interval included NAPL-coated grains and potential NAPL saturation. Exceedances were generally limited to the southern portion of the Loading Platform Area, corresponding to the area described above with the most significant physical impacts (Plate 11). All of the sample exceedances were collected from zones either directly corresponding to or were located immediately adjacent to zones with physical impacts described above. Other elevated PAH impacts (>500 mg/Kg) were identified in the 102- to 104-foot interval from GPEC-SB03 (7,479 mg/Kg), the 88- to 89-foot interval from GPEC-SB105 (6,458.8 mg/Kg), the 102- to 103-foot interval from GPEC-SB106 (6,415.7 mg/Kg), and the 71- to 72-foot interval from GPEC-SB205 (3,166.2 mg/Kg). PAH compounds exceeding the IUSCOs included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, acenaphthene, fluorene, naphthalene, phenanthrene, and pyrene.

No detections of other VOCs, other SVOCS, or metals were above their respective IUSCO. PCBs and free cyanide were not detected in any of the samples collected.

## *5.2.3. Groundwater*

The groundwater results for the Loading Platform Area are shown in Table 14. Groundwater exceedances for the targeted compounds during the RI and PDI phases are shown for the three depth zones on Plates 13, 14 and 15, respectively. Groundwater exceedances are shown similarly for the 2024/2025 additional groundwater sampling event on Plates 16 through 18.

Groundwater flow in the shallow, intermediate, and deep zones is discussed in Section 4.2.1, 4.2.2, and 4.2.3, respectively. Groundwater elevation contours for the shallow, intermediate, and deep aquifer zones are presented on Figures 20 through 31. Groundwater flow in the northern and central sections, particularly in the shallow and intermediate zones, of the Loading Platform Area is likely affected by groundwater withdrawal systems operated by the responsible parties under NYSDEC's direction. A groundwater recovery system now handles groundwater pumped from the ExxonMobil off-site plume, Former Paragon Oil Property, and the former BP Amoco terminal as discussed in Section 2.6.2. The withdrawal is likely responsible for the relatively flat groundwater gradients in this area of the Site.

#### 5.2.3.1. Shallow (<El. -20 feet)

*PDI and RI Phases*

A total of 17 groundwater samples were collected from eight wells in the shallow zone in the Loading Platform Area during the PDI and Phase 1 of the RI (see Table 14). Groundwater exceedances of the targeted compounds in the shallow zone of the Loading Platform Area during the PDI or the RI were identified for BTEX (four wells), PAHs (two wells), and CVOCs (one well). Concentrations above 100 µg/L were limited to total PAHs in two wells (GPEC-MW-2 and GPEC-GT10S) and during the PDI or Phase 1 of the RI. The estimated area of elevated total PAH impacts (>100 µg/L) encompassed the southern and eastern portion of Area 1 and the southern portion of Area 2 during the PDI or RI (Plate 13).

BTEX concentrations during the PDI or RI in shallow wells were relatively low, ranging from ND in four wells to 64.3 µg/L in the July 2009 sample from GPEC-MW-2. Benzene, ethylbenzene, and total xylene exceeded their respective AGWQS in this sample and the December 2012 sample from this well, with maximum concentrations of 5.3 µg/L, 37 µg/L, and 22 µg/L, respectively. The AGWQS for benzene is 1 µg/L, and 5 µg/L for ethylbenzene and total xylene. GPEC-MW-2 is screened through an interval with identified petroleum and residual NAPL-related impacts. Exceedances in the remaining wells during the PDI or RI were limited to slight exceedances of benzene.

PAH exceedances were limited to the October 2009 sample from GPEC-GT-10S and the July 2009 and December 2012 samples from GPEC-MW-2, with total concentrations of 166.56 µg/L, 746.5 µg/L, and 196.492 µg/L, respectively. PAH compounds exceeding the AGWQS primarily included naphthalene in all three samples, with a maximum concentration of 410 µg/L in the July 2009 sample from GPEC-MW-2, and lesser concentrations of acenaphthene in both samples from GPEC-MW-2 and benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, and/or chrysene in samples from both wells. The AGWQS for naphthalene and acenaphthene are 10 µg/L and 20 µg/L, respectively.

CVOCs detections above the AGWQS were limited to an estimated concentration of 1,1-DCE in the December 2012 sample collected from GPEC-MW-2 (0.487 µg/L). The AGWQS for 1,1-DCE is 0.07 µg/L.

There were no detections of other VOCs or other SVOCs above the AGWQS.

PCBs were not detected in any of the samples collected.

Total metals detections above the AGWQS included arsenic (two samples), barium (one sample), iron (12 samples), lead (two samples), magnesium (six samples), manganese (13 samples), sodium

(15 samples), and thallium (one sample). Iron, magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic (maximum of 41.6 µg/L from GPEC-GT10S in December 2012), barium (1,050 µg/L from GPEC-MW202 in December 2012), lead (maximum of 55.5 µg/L from GPEC-GT10S in October 2009), and thallium (4.2 µg/L [estimated] from PZ-2 in July 2009) concentrations were relatively low, remaining within the same order of magnitude as the respective AGWQS, with the exception of thallium, which remained within one order of magnitude of the AGWQS.

Total cyanide was detected above the AGWQS of 200 µg/L in the sample collected from GPEC-GT-10S (582 µg/L) in October 2009, and July 2009 (644 µg/L) and December 2012 (331 µg/L) samples from PZ-2. Free cyanide was detected in these samples with concentrations of 4 µg/L (estimated), 2 µg/L (estimated), and 7 µg/L.

### *2024/2025 Additional Groundwater Sampling*

Groundwater samples were collected from six wells in the shallow zone in the Loading Platform Area during the 2024/2025 additional groundwater sampling event (see Table 14). One PFAS sample was collected from the shallow zone in the area (GPEC-MW-3WT). Exceedances of the targeted compounds were limited to acenaphthene and naphthalene in GPEC-MW-2 with concentrations of 30 µg/L and 36 µg/L, respectively. No concentrations above 100 µg/L were identified (Plate 16).

No other CVOCs, VOCs or SVOCs were detected above the AGWQS.

Neither PCBs nor EPH (C19-C36) were detected in any of the samples collected.

Dissolved metals detections above the AGWQS included arsenic, magnesium, manganese, selenium and sodium. Magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic was detected above the AGWQS of 25 µg/L in GPEC-GT10S (32.6 µg/L). The selenium exceedance of the AGWQS of 10 µg/L was identified in GPE-MW2S (10.5 µg/L).

PFAS analysis was conducted on one shallow well (GPEC-MW3WT) in the Loading Platform area during the 2024/2025 additional groundwater sampling event. Exceedances of the human health criteria for PFOS and PFOA were identified for PFOS (4.63 ng/L) and PFOA (8.26 ng/L).

## 5.2.3.2. Intermediate (El. -20 to -50 feet)

### *PDI and RI Phases*

A total of 22 groundwater samples were collected from 14 wells in the intermediate zone in the Loading Platform Area during the PDI, Phase 1 of the RI, and the Loading Platform Area Investigation (see Table 14). One groundwater sample was also collected from well GPEC-MW-3S during the Emerging Contaminant Groundwater Investigation. Exceedances of the targeted compounds were identified for BTEX (three wells), PAHs (six wells), and CVOCs (three wells). Concentrations of BTEX (GPEC-MW-103) and total PAHs (GPEC_MW-3S and GPEC-MW-103) above 100 µg/L were limited to the eastern portion of Area 1 and the southern portion of Area 2 (Plate 14).

BTEX exceedances were limited to monitoring wells GPEC-MW103 in both the August 2010 (445.1 µg/L) and December 2012 (36.583 µg/L) samples, GPEC-MW-3S (70 µg/L) in the July 2009 sample, and GPEC-MW410 (8.58 µg/L). Individual BTEX constituent exceedances included benzene in samples from all three wells, ethylbenzene, and total xylene in the samples from GPEC-MW103 and GPEC-MW-3S, and toluene in GPEC-MW103. The AGWQS for benzene is 1 µg/L and for ethylbenzene, toluene, and total xylene is 5 µg/L.

PAH exceedances of the AGWQS were identified in the samples collected from GPEC-MW103 (1,226.4 µg/L) in August 2010, GPEC-MW-3S in July 2009 (341.9 µg/L) and December 2012 (1.427 µg/L), GPEC-MW-4 (24.94 µg/L) in July 2009, GPEC-MW405 (92.48 µg/L), GPEC-MW409 (4.057 µg/L), and GPEC-MW410 (81.37 µg/L). The primary constituent was naphthalene, with lesser concentrations of acenaphthene, benzo(a)anthracene, benzo(a)pyrene, and chrysene. GPEC-MW103 is screened across an interval with visual observations of potentially DNAPL-saturated lenses, but there has been no NAPL accumulation within the well. GPEC-MW-3S is screened across an interval with lesser NAPL-related impacts. GPEC-MW405, GPEC-MW409, and GPEC-MW410 are screened across intervals with residual NAPL-related impacts.

CVOC exceedances included detections of 1,2-DCA in three samples collected from GPEC-MW103 (1.43 µg/L) in December 2012, GPEC-MW404 (0.755 µg/L), and GPEC-MW405 (0.86 µg/L). The AGWQS for 1,2-DCA is 0.6 µg/L.

Detections of other VOCs above the AGWQS were limited to two detections of acetone in GPE-MW-2D and GPE-MW-3D with concentrations of 174 µg/L and 94.3 µg/L, respectively. The AGWQS for acetone is 50 µg/L.

Detections of other SVOCs above the AGWQS was limited to one estimated detection of nitrobenzene in GPEC-MW410 with a concentration of 0.43 µg/L. The AGWQS for nitrobenzene is 0.4 µg/L.

PCBs were not detected in any of the samples collected.

Total metals detections above the AGWQS included arsenic, iron, lead, magnesium, manganese, and sodium. Iron, magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic was detected above the AGWQS of 25 µg/L in samples collected from GPE-MW-2D in July 2009 (290 µg/L) and December 2012 (312 µg/L), GPE-MW-4D in July 2009 (54.1 µg/L) and December 2012 (25.2 µg/L), and GPEC-MW-5S (33.6 µg/L) in July 2009. The lead exceedance was detected in the July 2009 sample from GPE-MW4D (40.1 µg/L) and remained within the same order of magnitude as the AGWQS.

Total cyanide was detected above the AGWQS of 200 µg/L in the sample collected from GPE-MW-4D (945 µg/L) in December 2012. Free cyanide was not detected in this sample.

The concentration of perfluorooctanic acid (PFOA) in GPEC-MW-3S (29.4 nanograms per liter [ng/L]) was detected above the drinking water screening level of 20 ng/L during the Emerging Contaminant Groundwater Investigation. The total PFAS concentration in this well was 62.79 ng/L which is below the screening level of 500 ng/L for total PFAS. 1,4-dioxane was ND in this well.

*2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from 14 wells in the intermediate zone in the Loading Platform Area during the 2024/2025 additional groundwater sampling event (see Table 14). PFAS samples were collected from two intermediate wells in the area (GPEC-MW-3S and GPEC-MW-5S). Exceedances of the targeted compounds were limited to CVOCs in one well (GPEC-MW405) and no concentrations above 100 µg/L were identified (Plate 17). CVOC exceedances included detections of 1,2-DCA (0.64 µg/L) and vinyl chloride (2.2 µg/L) in GPEC-MW405. The AGWQS for 1,2-DCA and vinyl chloride are 0.6 µg/L and 2 µg/L, respectively.

No other VOCs or SVOCs were detected above the AGWQS.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included arsenic, magnesium, manganese, and sodium. Magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic was detected above the AGWQS of 25 µg/L in samples collected from GPE-MW-2D (120 µg/L) and the associated duplicate sample (134 µg/L) and GPEC-MW-5S (34.8 µg/L).

EPH(C19-C36) was detected in two of the 14 intermediate samples (plus a duplicate sample) collected in the intermediate zone. The detections were observed in GPEC-MW103 (180 µg/L) and the associated duplicate sample with the maximum concentration of 790 µg/L detected in GPEC-GT-10, which is located along the southeastern boundary of the Site.

PFAS analysis was conducted on two intermediate wells in the Loading Platform area during the 2024/2025 additional groundwater sampling event. Exceedances of the human health criteria for PFOS and PFOA were identified in each of the two wells sampled. The maximum concentrations of PFOS (10.1 ng/L) was detected in GPEC-MW3S, while the maximum detection of PFOA (28.7 ng/L) was detected in monitoring well GPEC-MW-5S.

### 5.2.3.3. Deep (>El. -50 feet)

*PDI and RI Phases*

A total of 10 groundwater samples were collected in the deep zone from seven wells in the Loading Platform Area during the PDI, Phase 1 of the RI, Groundwater Model Investigation, and the Loading Platform Area Investigation (see Table 14). Exceedances of the targeted compounds were identified for BTEX (four wells), PAHs (four wells), and CVOCs (six wells). Concentrations of BTEX (GPEC-MW-3D and GPEC-MW407) and total PAHs (GPEC-MW-2D, GPEC-MW-3D, GPEC-MW-5D and GPEC-MW407) above 100 µg/L in the deep zone were generally found in similar areas to the shallow and intermediate zone; however, they extended slightly farther north into Area 2 (Plate 15). Concentrations of total CVOCs (two wells) above 100 µg/L in the deep zone were found in two small areas in the southern and central portions of Area 2.

BTEX exceedances of the AGWQS were identified in samples collected from GPEC-MW-2D in August 2010 (29 µg/L) and December 2012 (8.657 µg/L), GPEC-MW-3D in July 2009 (885 µg/L) and December 2012 (281.32 µg/L), GPEC-MW-5D in July 2009 (37.9 µg/L) and December 2012 (7.24 µg/L), and GPEC-MW407 (231.2 µg/L). The primary constituents were generally ethylbenzene and total xylenes and lesser concentrations of toluene and benzene.

PAH exceedances of the AGWQS were identified in the samples collected from GPEC-MW-2D in August 2010 (909.6 µg/L) and December 2012 (84.88 µg/L), GPEC-MW-3D in July 2009 (3,736 µg/L) and December 2012 (234.51 µg/L), GPEC-MW-5D (125.4 µg/L) in July 2009, and GPEC-MW407 (745.3 µg/L). The primary constituent was naphthalene and lesser concentrations of acenaphthene, fluorene, and phenanthrene. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene also exceeded their respective AGWQSs in the samples collected from GPEC-MW-3D. GPEC-MW-2D and GPEC-MW-3D are screened across intervals with visual observations of potentially DNAPL-saturated zones. There has been no NAPL accumulation in GPEC-MW-2D and NAPL accumulation began in GPEC-MW-3D in late 2024 following redevelopment of the well prior to groundwater sampling. GPEC-MW407 is screened across an interval with NAPL-coated zones and other residual NAPL-related impacts. GPEC-MW5D is screened across an interval with residual NAPL-related impacts.

CVOC exceedances of the AGWQS were identified in samples collected from GPEC-MW-2D in August 2010 (100.6 µg/L) and December 2012 (80.04 µg/L), GPEC-MW-3D in July 2009 (29.9 µg/L) and December 2012 (47.24 µg/L), GPEC-MW4D (237.724 µg/L), GPEC-MW1D (41.545 µg/L), GPEC-MW406 (15.694 µg/L), and GPEC-MW407 (19.49 µg/L). The primary constituent was PCE with generally lesser concentrations of TCE, cis-1,2-DCE, 1,2-DCA, and vinyl chloride.

There were no detections of other VOCs or other SVOCs above the AGWQS.

PCBs were not detected in any of the samples collected.

Total metals detections above the AGWQS include arsenic, iron, magnesium, manganese, and sodium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic exceedances above the AGWQS of 25 µg/L were limited to GPEC-MW5D with concentrations of 397 µg/L in July 2009 and 156 µg/L in December 2012.

Total cyanide was detected above the AGWQS of 200 µg/L in the sample collected from GPEC-MW-5D (288 µg/L) in July 2009. Free cyanide was detected at an estimated concentration of 2 µg/L in this sample.

### *2024/2025 Additional Groundwater Sampling Event*

A total of eight wells were sampled in the deep zone in the Loading Platform Area during the 2024/2025 additional groundwater sampling event (see Table 14). PFAS samples were collected from two deep wells in the area (GPEC-MW1D and GPEC-MW-5D). Exceedances of the targeted compounds were identified for BTEX (four wells), PAHs (two wells), and CVOCs (five wells). Concentrations of targeted compounds above 100 µg/L in the deep zone were limited to total PAHs in GPEC-MW-2D(Plate 18).

BTEX exceedances of the AGWQS were identified in samples collected from GPEC-MW-2D, GPE-MW2D2, GPEC-MW5D and GPEC-MW407. The BTEX constituents exceeding the criteria included benzene and ethylbenzene in two wells and toluene in one well. The maximum total BTEX concentration in these wells was 22.9 µg/L in GPEC-MW2D.

PAH exceedances of the AGWQS were identified in the samples collected from GPEC-MW-2D and GPEC-MW407. Acenaphthene (31 µg/L), and naphthalene (81 µg/L), exceeded the respective AGWQS in GPEC-MW-2D, which had a total PAH concentration of 121.3 µg/L. Only naphthalene exceeded the AGWQS in GPEC-MW407 with a concentration of 32 µg/L. GPEC-MW2D is screened across an interval with visual observations of potentially DNAPL-saturated zones, but there has been no NAPL accumulation in the well. GPEC-MW407 is screened across an interval with NAPL-coated zones and other residual NAPL-related impacts.

CVOC exceedances of the AGWQS were identified in samples collected from GPEC-MW1D, GPEC-MW-2D, GPEC-MW4D, GPEC-MW406 and GPEC-MW407. 1,2-DCA slightly exceeded the criteria in GPEC-MW2D (1.2 µg/L), GPEC-MW-406 (1.3 µg/L), and GPEC-MW407(1.7 µg/L). Cis-1,2-DCE also exceeded the criteria in GPEC-MW406 (5.3 µg/L), GPECMW407 (9.4 µg/L), GPEC-MW1D (17 µg/L), as well as GPEC-MW-4D (12 µg/L). More significant exceedances of PCE and TCE were identified in GPEC-MW4D with concentrations of 43 µg/L, and 29 µg/L, respectively.

There were no detections of other VOCs above the AGWQS.

Other SVOC exceedances of the AGWQS were limited to phenol in GPEC-MW5D2 with an estimated concentration of 1.5 µg/L.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS include arsenic, magnesium, manganese, and sodium. Magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic exceedances above the AGWQS of 25 µg/L were limited GPEC-MW407 with a concentration of 28.3 µg/L.

EPH(C19-C36) was detected in 1 of the 8 deep samples collected with a maximum concentration of 240 µg/L in GPEC-MW-2D, located in the southern portion of Area 2 adjacent to the Loading Platform.

PFAS analysis was conducted on two deep wells in the Loading Platform area during the 2024/2025 additional groundwater sampling event. Exceedances of the human health criteria for PFOS and PFOA were identified in each of the two wells sampled, with the maximum concentrations of PFOS (7.17 ng/L) and PFOA (30.6 ng/L) detected in monitoring well GPEC-MW5D located in the northern portion of Area 2.

### *5.2.4. NAPL*

Visual observations of potentially DNAPL-saturated soil were identified in eight borings (out of 54 borings advanced in the area) within the intermediate and deep intervals in the southern portion of the Loading Platform Area as shown on plan-view Plates 10 and 11 and cross-section Figure 15. No potential

NAPL saturated soils were visually observed in the shallow interval (0 to 25 ft bgs). Seven out of eight of the borings with visual observations of potentially DNAPL-saturated soil are either in Area 1 or in the southern portion of Area 2. Visual observations of potentially DNAPL-saturated soil was also identified in a narrow interval (1.3 feet thick) in boring GPEC-SB05C, located to the north of this area adjacent to LNG Tank 1. The visual observations of potentially DNAPL-saturated zones in these borings reach a maximum thickness of approximately 7 feet in GPEC-MW409 and GPEC-RW409. Additional borings were advanced in the vicinity of the visual observations of potentially DNAPL-saturated areas excluding the deep zones of boring GPEC-SB205 and GPEC-SB207. Each of the areas of potential NAPL saturation are discussed in greater detail below.

The visual observations of potentially DNAPL-saturated soil in the MW409/RW409 area was identified from approximately 30 to 37 feet bgs (approximately El. -23 to -30 feet above msl) at the base of a fill layer and is confined within a small pocket created by a confining layer of fine-grained soil (Figure 15). The lack of visual observations of potentially DNAPL-saturated soil in the surrounding borings advanced to the north, south, and west and the diminishing impacts visually observed beneath the confining layer in borings GPEC-MW409 and GPEC-RW409 indicate that the NAPL in this area is not mobile. NAPL has not been visually observed in recovery well GPEC-RW409 since it was developed, further indicating that the NAPL is not mobile. Visual observations of potentially saturated NAPL have not been identified in the sediment or underlying native material in Newtown Creek adjoining the MW409/RW409 area (Figure 16).

Visual observations of potentially DNAPL-saturated intervals were also identified at GPEC-SB01B, GPEC-SB03, GPEC-SB05C, GPEC-SB105, GPEC-SB205 and GPEC-SB207. Monitoring or recovery wells have been installed with screened intervals across each of the potentially DNAPL-saturated areas identified above, excluding a narrow lense (approximately 6-inches) of potential saturation at GPEC-SB207. Excluding GPEC-SB01B (GPEC-MW01R), GPEC-SB03 (GPEC-MW3D) and GPEC-SB205 (GPEC-MW205) as discussed below, NAPL has not accumulated in these wells indicating that the NAPL in these locations is not mobile.

There have been a total of 147 monitoring wells or piezometers installed at GPEC during the RI or previous investigations and NAPL accumulation within monitoring or recovery wells had been limited to DNAPL in wells GPEC-MW01R, GPEC-MW-3D and GPEC-MW205 located to the east of the Stores Building in Area 1 (MW-01 Area). GPEC-MW01R and GPEC-MW205 are 4 inches in diameter and have 5-foot sumps. Monitoring well GPEC-MW-01R is screened from 50 to 60 feet bgs and GPEC-MW205 is screened from 65 to 75 feet bgs. GPEC-MW-3D is two inches in diameter, is screened from 90 to 105 feet bgs and has a 2-foot sump. Well construction logs are provided in Appendix O.

The accumulated DNAPL reached a maximum thickness in each well of approximately 7 feet, in April 2016 and October 2012, respectively (Table 5). Routine gauging of this monitoring well began in 2015, with recovery conducted as the measured DNAPL thickness approaches the sump length of the well. Analytical results from DNAPL samples collected from these wells are provided in Table 19.

As part of the additional sitewide groundwater monitoring event, wells with silt accumulation at the bottom of the well were redeveloped. GPEC-MW3D was part of the redevelopment effort. Following development of this well, NAPL began to accumulate within the two-foot sump installed in the well.

Routine monitoring of this well began in December 2024 and recovery efforts began March 2025, with approximately 0.5 gallons of NAPL recovered per event. The recovery schedule will be re-evaluated following additional recovery events.

The visual observations of potentially DNAPL-saturated soil in the MW-01 area was identified a minimum of 50 feet bgs, which is substantively deeper (a minimum of approximately 15 feet) than the potential NAPL saturation visually observed near the native sand and accumulated sediment interface in Newtown Creek. Excluding boring GPEC-MW409/ RW409 (discussed above) and GPEC-SB05C, where visual observations of potentially DNAPL-saturated soil was identified from approximately 32 to 33.3 feet bgs, the visual observations of potential NAPL saturation identified in the other borings in the Loading Platform area were also substantively deeper than the potential NAPL saturation visually observed near the native sand and accumulated sediment interface in Newtown Creek. The potential NAPL saturation visually observed in GPEC-SB05C has not accumulated in the well installed at this location across the potentially saturated zone and is also not located adjacent to NAPL impacts in Newtown Creek. This, along with the fact that no visual observations of potentially DNAPL-saturated soil have been identified in the shallow soil zone in Areas 1 or 2, illustrates that the potential NAPL saturation visually observed near the native sand and accumulated sediment interface in Newtown Creek did not originate from lateral migration from the Site. Further discussion of NAPL disposition in the area is provided in Section 8.2.2.

DNAPL rebound testing was conducted on wells GPEC-MW-01R and GPEC-MW205 in February 2013 and in January 2016. Approximately 11.5 gallons and 3.25 gallons of DNAPL were removed from GPEC-MW01R, and 10.5 gallons and 3.5 gallons were removed from GPEC-MW205 in 2013 and 2016, respectively. GPEC-MW01R recovered to approximately 96 percent of its initial thickness in approximately 9 weeks in 2013 (0.11 ft/day). Full recovery was achieved in approximately six weeks in 2016 (0.09 ft/day). GPEC-MW205 recovered to approximately 82 percent in 2013 in approximately nine weeks (0.11 ft/day) and full recovery in approximately 18 weeks in 2016 (0.03 ft/day). NAPL-recovery graphs for the 2016 rebound testing event illustrating the slow recharge in these wells are shown on Figure 34. Active DNAPL recovery from these wells began in May 2016. Monthly DNAPL thickness measurements and recovery volumes are provided in Table 5. Approximately 155 gallons and 58 gallons of DNAPL have been removed to date from GPEC-MW-01R and GPEC-MW205, respectively.

No apparent source for the visual observations of potential NAPL-saturation in the borings and DNAPL in these two wells has been identified. The closest likely source area would be the former tar storage tank associated with the former by-products building which was located approximately 500 feet to the west. Borings have been drilled in the areas between the former tar storage tank and the potential NAPL-saturation area discussed above; however, no visual observations of potential NAPL saturation was identified. Therefore, it is unlikely that the former tar storage tank was the source of the identified NAPL in the area.

#### 5.2.4.1. Sediment

Sediment sampling within Newtown Creek was conducted as part of the PDI in an effort to determine if NAPL containment along the Loading Platform was necessary. The analytical results from the sediment samples collected during the PDI are provided in Table 21. Sediment logs are provided in Appendix Q. In

addition to the sediment sampling conducted during the PDI, investigations of the sediment within Newtown Creek have also been conducted by Anchor as described in Section 2.6.2 and shown on Plate 2.

Visual observations of potentially DNAPL-saturated zones within the sediments in Newtown Creek have been identified during the PDI and other investigations. A cross-section of the sediment along the Loading Platform is provided on Figure 16. As part of the Loading Platform construction in the late 1920s, sediments within the creek, including part of Mussel Island (Plate 1) formerly located to the east of the current LNG Tank 1, were dredged to a depth of approximately 30 feet below the water line (El. -28 feet above msl). This depth represents the historic creek bottom circa 1927. Between that time and present day, approximately 16 feet of shallow sediment have accumulated in the vicinity of and beneath the Loading Platform. The accumulated sediments beneath the Loading Platform are believed to be impacted similarly as those outboard of the platform, because there is no physical separation between the two and they are directly connected and the inboard area is limited in width.

All of the visual observations of potential NAPL saturation identified in the borings and wells in the southern Loading Platform Area, with the exception of the GPEC-MW409/RW409 area, on the landside occurs a minimum of 15 feet below the historic dredge line of the creek (-28 feet msl), (Figure 15). This depth is substantively deeper than the potential NAPL saturation visually observed near the native sand and accumulated sediment interface in Newtown Creek. This illustrates that the NAPL in accumulated sediments did not originate from lateral migration from the Site but rather from historic releases to the Creek surface that migrated vertically to the sediment bed or by migration from off-Site sources. Further discussion on this topic is provided in Section 8.2.2.1 (CSM).

As for the GPEC-MW409/RW409 area, the potentially DNAPL-saturated soil was visually observed at the base of a fill layer (from approximately El. -23 to -30) and is confined within a small pocket created by a confining layer of fine-grained soil (Figure 15). The lack of NAPL accumulation in recovery well GPEC-RW409, the lack of visual observations of potentially DNAPL-saturated soil in the surrounding borings, and the diminishing impacts visually observed beneath the confining layer indicate that the NAPL in this area is not mobile. Potentially DNAPL-saturated sediment or underlying native material has not been visually observed in Newtown Creek adjoining the MW409/RW409 area (Figure 16).

Further discussion of possible NAPL sources, migration, fate, and transport in the Loading Platform Area and sediments is provided in Section 8.2.2.

Sediment analytical results indicate that VOCs, SVOCs, PCBs, dioxins, pesticides, herbicides, petroleum hydrocarbons, free and total cyanide, and metals were present at detectable concentrations in one or more Newtown Creek sediment samples collected during the investigation. Three VOC compounds, several PAHs, bis-(2-ethylhexyl)phthalate, total PCBs, a subset of pesticides, and a number of metals were detected at concentrations which exceed National Oceanographic and Atmospheric Administration ERM.

### *5.2.5. Stormwater Evaluation*

The stormwater evaluation conducted in the central utility corridor for the former plant (along the Stores Building and Service Building) did not reveal visual presence of any environmental impacts related to

former operations conducted at the Site. The investigation also did not identify any preferential pathways for groundwater flow along the utility corridor located in the area.

## 5.3. Maspeth Alignment

The Maspeth Alignment is comprised of Areas 4 and 5. This area was investigated during Phase 1 and Phase 2 of the RI, PDI, Groundwater Model Investigation. Additional investigation as part of capital improvement projects was also performed in the area. The current and historical uses of these areas are summarized as follows:

Area 4 includes several parking lots, including the employee parking lot, the Transportation Building, the Facilities Building, Substation A, the southwest portion of the Stores Building, a compressed natural gas (CNG) station, roadway, and a pipe laydown area. The eastern section of Area 4, which fronts along Maspeth Avenue, contained industrial land initially developed in the mid-19th century. Prior to 1915, a large glue factory operated on the east section of the area and between 1927 and 1957 a gas plant operated in the area. Later, a SNG plant operated in the central section of Area 4 (1973–1985).

Area 5 was the site of the former Maspeth Holders Station (Holders 1 and 2) and a regulator station. The holders were removed in 2001. Currently, Area 5 includes a ball field and the (non-operational) gas regulator station. The ball field is not currently in use. A natural gas pipe cleaning area is located on the western side of the Site near the center of Area 5. This process includes cleaning of natural gas pipe and other non-porous metal surfaces contaminated with PCBs. The process is performed and managed under a USEPA permit. As discussed elsewhere in the report, 113 surface and subsurface soil samples were collected and analyzed for PCBs from Area 5. No samples exceeded the IUSCO (25 mg/kg) and only six samples exceeded UUSCO of 0.1 mg/kg. There are no potential migration pathways from this area to Newtown Creek or English Kills as the area is located inland and there are no storm sewers, manholes, or grates within approximately 150 feet of the pipe cleaning area. The area includes tanks located on a concrete pad, thereby minimizing the potential for release to soils.

The location of the historical MGP-infrastructure is shown on Plate 1.

### *5.3.1. Surface Soil*

A total of four surface soil samples were collected within Areas 4 and 5 during Phase 2 of the RI. Exceedances were limited to benzo(a)pyrene and arsenic. Benzo(a)pyrene exceeded the IUSCO of 1.1 mg/Kg in each of the samples collected with a maximum detection of 6.13 mg/Kg in the duplicate sample from GPEC-SS304. This sample was collected in the vegetated area southwest of Holder 1. A slight exceedance of the IUSCO for arsenic (16 mg/Kg) was identified in the duplicate sample from GPEC-SS303 (16.3 mg/Kg), located in the vegetated area near the Facilities Building in Area 4. The concentration in the parent sample was 15.2 mg/Kg.

It is noted that should the ballfields located in southwest corner of Area 5 be proposed for use in the future, RRSCOs would apply, not the IUSCOs.

## *5.3.2. Subsurface Soils*

The soil analytical results for the Maspeth Alignment are shown in Table 11. Soil exceedances for the targeted compounds, along with field observations of impacts are shown for the three depth zones on Plates 4, 5, 10 and 11, respectively. Cross-section D-D' (Figure 18) was developed to illustrate the geology underlying the southern boundary of the Maspeth Alignment.

Due to the number of samples collected, the shallow zone discussion along the Maspeth Alignment will be further divided into Areas 4 and 5.

### 5.3.2.1. Shallow (0 to 25 feet bgs)

No visual observations of potentially DNAPL-saturated soil were identified in the shallow zone within Area 4. Elevated (>500 mg/Kg) concentrations of total PAHs in Area 4 were identified in the areas adjacent to the western and central portions of the Transportation Building and a small area along Maspeth Avenue in the central portion of Area 4 (Plate 4).

In Area 5, potentially DNAPL-saturated areas were visually observed in the shallow zone in the vicinity of Holder 1, as well as in a narrow interval in the former ball field. Elevated total PAH concentrations were generally found coincident with these areas (Plate 4), as well as in the vicinity of Holder 2 and two small areas in the western portion of the Area.

#### *Field Observations*

A total of 38 borings and 16 test pits were advanced in the shallow zone in Area 4. An additional six borings were advanced in Maspeth Avenue as part of the Groundwater Model Investigation and are discussed within this section. An additional three geotechnical borings (GT- series) were advanced where CPTs were performed. No potentially DNAPL-saturated areas were identified in the shallow zone in Area 4 in the 38 borings and 16 test pits that were advanced. Residual NAPL impacts (blebs, sheen or coating) in the shallow zone in Area 4 was limited to three borings (out of 38 borings advanced), GPEC-GT03, GPEC-SB310, and GPEC-SB317, and two test pits (out of 16 test pits advanced), GPEC-TP301 and GPEC-TP312. NAPL coating was identified in the 8- to 10-foot interval in GPEC-GT03, which was followed by NAPL blebs to approximately 15 feet bgs; and in the 4- to 7-foot interval in GPEC-TP312. GPEC-TP312 was terminated at 7 feet bgs due to the presence of timbers preventing further advancement. Solid NAPL granules were noted in the 1.7- to 2.5-foot interval of GPEC-TP301. Sheen was visually observed in the 8- to 13-foot interval (approximate) in borings GPEC-SB310 and GPEC-SB317. NAPL coatings on soil were also noted in the shallow zone (above 10 feet bgs) in several pits excavated as part of capital improvement projects, which is consistent with boring GT-03 located in the immediate area of the pits. Potential source areas near these locations include a waste catalyst storage area near GPEC-SB310, oil scrubber and oil screening tank(s) near GPEC-SB317, a tar storage tank near GPEC-TP301, and the SNG facility near GPEC-TP312. Lesser impacts (staining or odors) were noted in three borings and eight test pits.

Petroleum-related impacts (sheens, staining or odors) in Area 4 were identified in numerous borings located along the southern perimeter of Area 4 beginning to the west of the employee parking lot near the CNG station and extending eastward and northward near the eastern end of the Transportation

Building. In the central section of this area, at boring GPEC-SB306, a petroleum coating was noted in the 10- to 15-foot interval. Several gasoline USTs were removed from the area in 1993; however, the tanks did not exhibit any signs of leakage upon removal. Petroleum (gasoline) impacts and free product (LNAPL) were visually observed in two wells (W-1 and W-2) in the area subsequent to the UST removals during an investigation by FP&M in 1993 and 1994. LNAPL was also detected in wells W-3 and W-4, located to the west of W-1 and W-2 on the south side of Maspeth Avenue during the BCF RI. Petroleum-related impacts were also identified in Maspeth Avenue in a boring advanced as part of the Groundwater Model Investigation. The findings of the groundwater investigation conducted by FP&M concluded that it is highly probably that free product was from a historic spill from an off-Site and upgradient source. Site-related odors were noted in the vicinity during historical investigations and during the RI. A summary of the previous investigations is provided in Section 2.6.1. Additional details are provided in Appendix J.

Petroleum-related impacts were also identified northward from the USTs removed in 1993 at borings GPEC-SB314 and GPEC-SB315.

A sulfur-like odor was noted in boring GPEC-GT08, located to the south of the Transportation Building.

A total of 49 borings and 13 test pits were advanced in the shallow zone in Area 5, including five borings advanced by others as part of the Equity RI. Several borings advanced to delineate impacts identified at GPEC-SB304, as well as GPEC-SB305 were located within the southern section of Area 9 but were designed to investigate the Maspeth Alignment and are discussed within this section. Visual observations of potentially DNAPL-saturated soil in the shallow zone was primarily limited to the vicinity of Holder 1. Potentially DNAPL-saturated soil was visually observed in GPEC-SB304, located to the northwest of Holder 1, and several associated delineation locations (304A, 304B, 304E, and 304S) with a maximum thickness of 11.6 feet. Potentially DNAPL-saturated soil was also visually observed to the southeast of Holder 1 in GPEC-SB332 and GPEC-MW332I, at a maximum thickness of approximately 3 feet. Potentially DNAPL-saturated soil was visually observed on top of the meadow mat layer at borings GPEC-304A, 304B, 304E, and GPEC-SB332, which was encountered between approximately 20 and 23 feet below grade. Recovery wells were installed adjacent to the GPEC-SB304 (GPEC-RW304) and GPEC-SB332 (GPEC-RW332) locations; however, NAPL accumulation within these wells has been limited to trace amounts in GPEC-RW332 (Table 5). Potential source areas near these locations include various tanks and piping identified in test pits associated with Holders 1 and 2 and the former Maspeth Station that occupied this region.

Visual observations of potentially DNAPL-saturated soil were also identified to the west of this area in a narrow interval in the shallow zone in the former ball field area. Boring SB-27, advanced as part of the Equity RI, identified potentially DNAPL-saturated soil in the 17.2 to 17.6 feet bgs interval, with a narrow interval of coating beneath. NAPL coating was noted in one other boring advanced as part of the Equity RI in the shallow zone in the area (SB-28), as shown on Plate 5.

Residual NAPL impacts (blebs, sheen, or coating) were also identified in Area 5 around the former gas holders. NAPL-coated intervals were identified- in five borings (GPEC-SB333, GPEC-SB334, GPEC-SB339, GPEC-SB350 and GPEC-SB351) and three test pits (GPEC-TP319, GPECTP321 and GPEC-TP322). NAPL-related blebs and/or sheen were identified in the shallow intervals in the vicinity of the areas

identified above adjacent to Holder 1, to the southeast of Holder 2 in GPEC-TP325 and GPEC-TP325EX, and in the former ball field in GPEC-SB903 and GPEC-SB904. Lesser NAPL impacts (staining or odors) were noted in three borings and one test pit.

Petroleum-related sheens were visually observed in two borings out of 49 borings advanced, including to the south of Holder 2 in the 11.7- to 25-foot interval (and continuing into the intermediate zone) of GPEC-SB341 and the 8- to 18.3-foot interval of GPEC-SB342. Petroleum staining or odors were identified in two borings out of 49 borings advanced, including further south in the former ball field at boring GPEC-SB336, which is located in the vicinity of out-of-service USTs, as well as in boring GPEC-SB347.

Sulfur-like odors and a clay/putty-like material was noted in delineation borings GPEC-SB304J and GPEC-SB304K. A sulfur-like odor and a paint residue-like substance was noted in boring GPEC-SB313, located in the former ball field. A burnt-like odor was noted in boring GPEC-SB349, located within Holder 2.

### *Analytical Summary*

A total of 90 samples were collected from the shallow zone within Area 4 during the PDI and Phase 2 of the RI. The samples were collected from borings and test pits. Exceedances of the targeted compounds were primarily limited to PAHs. A total of 38 (from 33 locations) of the 90 samples collected exceeded the IUSCOs for at least one PAH compound, while only two (from two locations) of the 90 samples exceeded for BTEX.

BTEX concentrations ranged from ND in 43 samples to 1,042 mg/Kg in the 8- to 10-foot interval of GPEC-GT03. There were no exceedances in this sample. The BTEX exceedances were limited to detections of benzene in the 16- to 18-foot interval of GPEC-GT05 and in the 12- to 13-foot interval of GPEC-SB317 with concentrations of 520 mg/Kg and 144 mg/Kg, respectively. The IUSCO for benzene is 89 mg/Kg. These borings are located in close proximity to each other along the central area of southern perimeter of Area 4 in the employee parking lot, in the vicinity of petroleum and NAPL-related impacts described above.

PAH concentrations ranged from ND in three samples to 2,911.1 mg/Kg in the 3- to 3.5-foot interval of GPEC-TP304/305. Individual PAH compounds exceeding the IUSCOs included benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene.

Due to the number of locations in Area 4 with PAH exceedances, which were generally found throughout the Area, the discussion will focus on higher level concentrations (>500 mg/Kg). Concentrations of total PAHs above 500 mg/Kg were identified in seven locations including GPEC-TP300, GPEC-TP301, GPEC-TP304/305, GPEC-TP307, GPEC-SB306, GPEC-SB324, and GPEC-GT03 (no exceedances in GPEC-GT-03), as shown on Plate 4. Excluding GPEC-SB306, the sample intervals with elevated concentrations of total PAHs were from 11 feet bgs or shallower. Excluding one location (GPEC-GT03), all of the locations with elevated total PAHs concentrations were identified in the areas adjacent to the western and central portions of the Transportation Building. Historical gas plant structures were formerly located in the vicinity (Plate 1). The impacts were primarily described as petroleum-related. These

impacts, particularly near the southern boundary of the Site in the area, may be related to or comingled with impacts from an off-Site source or sources.

No detections of other VOCs, SVOCs, PCBs, pesticides or herbicides were above their respective IUSCO.

Metals exceedances were limited to arsenic (20 samples), lead (three samples), manganese (one sample), mercury (11 samples), and zinc (one sample). The number of exceedances of lead (maximum of 16,700 mg/Kg in 5- to 5.5-foot interval from GPEC-SB320), manganese (10,400 mg/Kg in 7- to 8-foot interval from GPEC-SB329), and zinc (10,300 mg/Kg in 18.5-to 19.5-foot interval from GPEC-SB346) were limited. All of these exceedances, including the mercury exceedances (maximum of 44 mg/Kg in 2.5- to 3-foot interval from GPEC-TP316) and arsenic exceedances (maximum of 180 mg/Kg in 9- to 9.5-foot interval from GPEC-TP303), remained within one order of magnitude of the respective IUSCO. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface.

Free cyanide was not detected in any of the shallow samples collected in Area 4.

A total of 99 samples were collected from the shallow zone within Area 5 during Phase 1 and Phase 2 of the RI. The samples were taken from borings and test pits. Exceedances of the targeted compounds were primarily limited to PAHs. A total of 72 (from 34 locations) of the 99 samples collected exceeded the IUSCOs for at least one PAH compound, while only one of the 99 samples exceeded for BTEX.

BTEX concentrations ranged from ND in 43 samples to 2,137.4 mg/Kg in the 15- to 16-foot interval of GPEC-SB304, which is the location of the only BTEX exceedance. The estimated concentrations of ethylbenzene (893 mg/Kg) and total xylene (1,190 mg/Kg) were marginally above the respective IUSCOs of 780 mg/Kg and 1,000 mg/Kg. GPEC-SB304 is located to the northwest of Holder 1, in an interval and area with visual observations of potentially DNAPL-saturated soil.

PAH concentrations ranged from 0.116 mg/Kg in 22- to 23-foot interval of GPEC-SB343 to 18,231.2 mg/Kg in the 21- to 22-foot interval of GPEC-SB333. PAH exceedances of the IUSCOs included the compounds benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, fluoranthene, naphthalene, phenanthrene, and pyrene.

Similar to Area 4, the focus of the discussion will be on higher level PAH exceedances (>500 mg/Kg). Exceedances above 500 mg/Kg were identified in 22 samples from 14 locations (Plate 5). The locations with total PAHs exceeding 500 mg/Kg were primarily located in the vicinity of Holder 1. Additional locations with total PAHs above 500 mg/Kg were identified east and south of Holder 2, as well as near, or on the former ball field. Excluding GPEC-SB341 and GPEC-SB347, all of the locations were within or near NAPL-impacted areas previously discussed that may explain the higher-level PAH exceedances. The higher-level PAH exceedances from locations GPEC-SB341 and GPEC-SB347 were collected from intervals with identified petroleum-related impacts.

No detections of other VOCs, other SVOCs, PCBs, pesticides, or herbicides were above their respective IUSCO.

Metals exceedances were limited to arsenic (maximum of 127 mg/Kg in 9.5- to 10-foot interval from GPEC-TP325EX), lead (maximum of 26,800 mg/Kg in 18.5- to 19.5-foot interval from GPEC-SB305), and mercury (25.6 mg/Kg in 4.5- to 5-foot interval from GPEC-SB340) in 24, 2, and 8 samples, respectively. All exceedance concentrations remained within one order of magnitude of the respective IUSCO. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface.

Free cyanide was not detected in any of the shallow samples collected in Area 5.

#### 5.3.2.2. Intermediate (25 to 60 feet bgs)

NAPL-related impacts in the intermediate zone were limited along the Maspeth Alignment. Visual observations of potentially DNAPL-saturated soil were limited to narrow intervals in two borings in the former ball field in Area 5. Petroleum-related impacts were evident in Area 4, predominantly near the southwest corner of the Transportation Building. These impacts correspond to shallow zone impacts identified in Area 4. No areas of elevated PAHs (> 500 mg/Kg) were identified (Plate 10).

##### *Field Observations*

A total of 43 borings were advanced into the intermediate zone along the Maspeth Alignment in Areas 4 and 5, including five borings advanced by others during the Equity RI. An additional three geotechnical borings (GT- series) were advanced where CPTs were performed in Area 4. Visual observations of potentially DNAPL-saturated soil were limited to two borings out of 43 borings advanced, including the 34- to 35-foot intervals of borings SB-27 and SB-33, which were advanced during the Equity RI. The potential NAPL saturation in this area is attributed to migration from the Equity site. Residual NAPL impacts were limited to three borings out of 43 borings advanced, including soil coatings in the 25- to 25.6-foot interval of GPEC-SB334 and 40- to 42-foot interval of GPEC-SB904 and a sheen in the 25- to 28-foot interval of GPEC-SB304I, all of which are in Area 5. The NAPL-coated intervals were identified in borings that were located in the vicinity of the two borings with visual observations of potentially DNAPL-saturated soil advanced as part of the Equity RI. Lesser impacts (staining or odors) were noted in two borings out of 43 borings advanced in the area.

Petroleum impacts along the Maspeth Alignment were limited to the upper portions of the intermediate zone and included petroleum-related sheens in two borings out of 43 borings advanced, identified in the 25- to 30-foot interval of GPEC-SB315 and the 25- to 26-foot interval of GPEC-SB341, located in Areas 4 and 5, respectively. Impacts in the intermediate zone in these borings correspond to those noted in the shallow zones. Lesser petroleum-related impacts (staining or odors) were noted in seven borings out of 43 borings advanced in the area.

Sulfur-like odors were identified in three borings out of 43 borings advanced, including GPEC-GT01, GPEC-GT03, and GPEC-GT04D.

##### *Analytical Summary*

A total of 18 samples were collected from the intermediate zone along the Maspeth Alignment during the PDI, Phase 1, and Phase 2 of the RI. Exceedances of the targeted compounds were limited to the

PAH compound benzo(a)pyrene in two samples, GPEC-SB304 in the 29- to 30-foot interval (2.67 mg/Kg) and GPEC-SB326 in 26- to 27-foot interval (1.95 mg/Kg). The IUSCO for benzo(a)pyrene is 1.1 mg/Kg. No elevated detections of total PAHs (>500 mg/Kg) were identified in the samples collected from the intermediate zone of the Maspeth Alignment.

Metals exceedances were limited to one detection of arsenic in the 28- to 28.5-foot interval of GPEC-SB341 (32.4 mg/Kg). The IUSCO for arsenic is 16 mg/Kg, respectively. The concentration of arsenic was within the typical background concentration range in the eastern United States (Table 13). Arsenic detections may be related to urban fill or former coal heating operations. Metals below the shallow fill zone are unlikely to be related to historical Site operations.

No detections of BTEX, other VOCs, or other SVOCs were above their respective IUSCO.

No PCBs or free cyanide were detected in any of the intermediate samples collected.

#### 5.3.2.3. Deep (>60 feet bgs)

*Field Observations*

A total of 25 borings were advanced into the deep zone along the Maspeth Alignment in Areas 4 and 5, including four borings advanced by others during the Equity RI. An additional three geotechnical borings (GT- series) were advanced where CPTs were performed in Area 4. Physical impacts were identified in one boring out of 25 borings advanced in the area and were limited to a 6-foot zone of potential NAPL saturation in boring SB-27, advanced during the Equity RI. The potential NAPL saturation in this area is attributed to migration from the Equity site.

*Analytical Summary*

A total of 16 samples were collected from the deep zone along the Maspeth Alignment during the PDI, Phase 1, and Phase 2 of the RI. No exceedances were identified in any of the samples collected in deep zone of the Maspeth Alignment for the targeted compounds.

Metals exceedances were limited to one detection of arsenic in the 98- to 99-foot interval of GPEC-SB222 (17.3 mg/Kg), which was slightly above the IUSCO of 16 mg/Kg. The concentration of arsenic was within the typical background concentration range in the eastern United States (Table 13). Arsenic detections may be related to urban fill or former coal heating operations. Metals below the shallow fill zone are unlikely to be related to historical Site operations.

No detections of other VOCs or other SVOCs were above the respective IUSCO.

No PCBs or free or total cyanide were detected in any of the deep samples collected.

### *5.3.3. Groundwater*

The groundwater results for the Maspeth Alignment are presented in Table 15. Groundwater exceedances for the targeted compounds are shown for the three depth zones on Plates 13, 14, and 15,

respectively. Groundwater exceedances are shown similarly for the 2024/2025 additional groundwater sampling event on Plates 16 through 18.

Groundwater flow in the shallow, intermediate and deep zones is discussed in Section 4.2.1, 4.2.2 and 4.2.3, respectively. Groundwater elevation contours for the shallow, intermediate, and deep aquifer zones are presented on Figures 20 through 31.

#### 5.3.3.1. Shallow (<El. -20 feet)

*PDI and RI Phases*

A total of 17 groundwater samples have been collected from 10 wells in the shallow zone during the PDI, Phase 1 and Phase 2 of the RI, and the Groundwater Model Investigation (see Table 15). Groundwater exceedances of the targeted compounds in the shallow zone were identified for BTEX and PAHs along the Maspeth Alignment in seven and eight wells, respectively. No exceedances of CVOCs were identified. Concentrations of BTEX and total PAHs above 100 µg/L were identified along the southern Site boundary in Area 4 (Plate 13). Several of the concentrations are significantly above 100 µg/L and may be related to or comingled with an off-Site source or sources as discussed below.

BTEX concentrations in shallow wells ranged from ND in three wells to 455,100 µg/L in the sample collected in October 2009 from GPEC-GT05. GPEC-GT05 is located in the southern portion of Area 4 in the employee parking lot and is screened across an interval with petroleum-related impacts (sheen, staining, and odors). Along with the elevated concentration in GPEC-GT05, elevated concentrations were also identified in GPEC-GT03 (maximum of 50,950 µg/L in October 2009), GPEC-GT04S (maximum of 170,000 µg/L in December 2012), W-1 (maximum of 15,050 µg/L in July 2009), and W-2 (maximum of 14,270 µg/L in July 2009), all of which are located along the southern perimeter in Area 4. GPEC-GT03 is screened across an interval with NAPL-related residues and GPEC-GT04S is screened across an interval with petroleum-related impacts (sheen, staining, and odors).

Benzene was the largest component of the BTEX concentrations identified in monitoring well GPEC-GT05 (450,000 µg/L in October 2009 sample) and was the only BTEX compound detected in GPEC-GT04S (170,000 µg/L in December 2012 sample), with the exception of an estimated concentration of ethylbenzene. Based on the petroleum impacts noted in each of these borings in the shallow zone, the direction of groundwater flow generally towards the Site from across Maspeth Avenue, and the location of these wells along the southern perimeter near other potential off-Site source areas, it is possible that these impacts are from an off-Site source or sources but may be comingled with Site-related impacts. The impacts identified in monitoring wells W-1 and W-2 were comprised of benzene, ethylbenzene, xylenes and to a lesser extent, toluene. These wells were installed as part of a groundwater investigation by FP&M in an area where USTs were previously removed in 1993. LNAPL has been measured in each of these wells historically at a maximum thickness of 0.15 feet. Impacts noted during investigations of the area by others indicated that a combination of petroleum-related impacts including free-product (LNAPL) resulting from an off-Site source and Site-related impacts in soil may be present.

Sources of contamination identified in this area of the Site possibly include the BCF and the former Gulf Oil Terminal/Ditmas Terminal located at 360-362 Maspeth Avenue and 364 Maspeth Avenue, respectively (Figure 6). LNAPL has been visually observed within several wells located on both of these properties in

areas identified as upgradient of the Site. The LNAPL in monitoring wells located at both facilities has been identified throughout the off-Site properties identified above including near the property boundaries along Maspeth Avenue and within the Maspeth Avenue ROW. LNAPL thicknesses have been measured at significantly greater thickness at BCF, measuring approximately 4 feet in the northeast corner of the BCF site along Maspeth Avenue and up to approximately 9 feet in thickness in a piezometer located approximately 100 feet south of Maspeth Avenue. LNAPL was also visually observed in two other wells (W-3 and W-4), installed during the 1993 UST investigation conducted by FP&M located to the west of W-1 and W-2 on the south side of Maspeth Avenue. Analysis of the LNAPL indicated its source was a mixture of gasoline and fuel oil. LNAPL thicknesses measured at the former Gulf Oil Terminal/Ditmas Terminal site were generally less than 0.1 feet. Monitoring wells W-1 and W-2, as well as other wells on the southern perimeter of the Site, are located downgradient of the northern property boundary of BCF and the former Gulf Oil Terminal/Ditmas Terminal site. Groundwater flow in this area was determined to be primarily northeastward during the BCF RI and during previous investigations at the former Gulf Oil Terminal/Ditmas Terminal site. Petroleum-related impacts to soil were also identified at BCF and petroleum impacts to groundwater were identified at BCF and the Gulf Oil Terminal/Ditmas Terminal site (BCF RI Report, Malcom Pirnie [2010], BCF Draft Upland Site Summary, Anchor QEA [2012], and Former Gulf Oil Terminal Draft Upland Site Summary, Texaco, Inc. [2012]).

The USEPA, beginning in May 2000, conducted an emergency response action at the BCF Oil site to address concerns about possible leakage from un-maintained USTs, ASTs, and drums. The removal action was requested by NYSDEC based on the large volume of PCB-contaminated waste oil in abandoned tanks, in combination with inadequate secondary containment, and the threat that any release posed to the environment including impacts to the English Kills. It was noted at that time that the ASTs' secondary containment area had cracks in the walls and only a partial floor. By October 2001, the USEPA had removed over 800,000 gallons of PCB-contaminated oil, wastewater, and sludge from the facility and cleaned and closed-in-place all ASTs/USTs on-site (Draft Data Applicability Report, Anchor 2012).

The northern half of the BCF site lies within the drainage area of a municipal stormwater system, which discharges to Newtown Creek at the terminus of Maspeth Avenue. The southern half of the BCF site drains directly to English Kills. Runoff from site surface drainage and water draw-off from process tanks was routed through an oil-water separator system before being discharged directly to English Kills. In August 1994, NYSDEC approved an emergency authorization to discharge wastewater containing oil, BTEX, and PCBs from the BCF site to English Kills. Effluent from a second oil-water separator apparently also discharged directly to English Kills at some point before 1990 (BCF Draft Upland Site Summary).

Total PAH concentrations ranged from ND in one well to a maximum value of 12,459 µg/L in the July 2009 sample from monitoring well W-1. The exceedances in Area 4 corresponded to the wells with BTEX exceedances in the area. Other elevated total PAH detections (>100 µg/L) in Area 4 were identified in GPEC-GT03 (maximum of 10,340 µg/L in October 2009), GPEC-GT05 (maximum of 4,905 µg/L in October 2009), and W-2 (maximum of 12,330 µg/L in July 2009). The primary PAH constituent exceeding the AGWQS was naphthalene, which was detected in each of the wells in the Area 4 with an identified PAH exceedance. PAH exceedances in Area 5 were identified at monitoring wells GPEC-MW222S, GPEC-MW339S, and GPEC-MW344S. In contrast to the constituents exceeding the AGWQS in Area 4, the Area 5 exceedances did not include naphthalene and were comprised of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene.

The total PAH concentrations in Area 5 were lower than the concentrations in Area 4, and none of the total PAH concentrations in Area 5 were above 100 µg/L. The area of elevated detections (> 100 µg/L) consisting of BTEX and total PAHs is shown on Plate 13.

Total PCBs were detected above the AGWQS of 0.09 µg/L in two monitoring wells, GPEC-MW101WT (1.54 µg/L) and GPEC-MW339S (0.687 µg/L). The exceedance of total PCBs in GPEC-MW101WT was identified in the sample collected in December 2012. The concentration of total PCBs in this monitoring well when sampled in September 2010 and resampled in January 2016 was ND. The earlier exceedance in monitoring well GPEC-MW101WT is attributed to entrained sediment in the sample. The turbidity in the sample, as measured in the field, was high (>1,000 NTUs). PCBs were not detected in soil collected at GPEC-SB339.

Detections of other VOCs above the AGWQS were limited to acetone in the December 2012 sample collected from W-2 (392 µg/L), carbon disulfide in GPEC-MW222S (78.4 µg/L), and styrene in GPEC-GT03 (maximum of 21,000 µg/L in October 2009). The AGWQS for these compounds are 50 µg/L, 60 µg/L, and 5 µg/L, respectively.

Detections of other SVOCs above the AWGQS were limited to 2,4-dimethylphenol in the July 2009 sample collected from W-2 (84 µg/L [estimated]) and phenol in the GPEC-GT04S (maximum 21.4 µg/L in December 2012) and GPEC-GT05 (maximum 68 µg/L [estimated] in October 2009). The AGWQS for these compounds are 50 µg/L and 1 µg/L, respectively.

Total metals detections above the AGWQS included arsenic, beryllium, cadmium, chromium, copper, iron, lead, magnesium, manganese, sodium, and zinc. Iron, magnesium, manganese and sodium content in groundwater is associated with natural conditions and are not associated with historical Site operations. The arsenic (maximum of 565 µg/L in the duplicate from the October 2009 sample from GPEC-GT03), beryllium (5.33 µg/L from GPEC-MW339S), cadmium (6.07 µg/L from GPEC-MW339S), chromium (61.1 µg/L from GPEC-MW339S), copper (985 µg/L in GPEC-MW339S), and zinc (2,400 µg/L in GPEC-MW339S) remained within one order of magnitude of the respective AGWQS. Lead was detected at a maximum concentration of 4,270 µg/L in the sample collected from GPEC-MW339S. The AGWQS for lead is 25 µg/L. The concentrations of beryllium, cadmium, chromium, copper, and zinc exceeding the AGWQS were identified in one well (GPEC-MW339S), located near the southwest perimeter of the Site. These concentrations may be attributed to an off-Site source or from entrained sediment in the sample.

Total cyanide was detected above the AGWQS in three samples collected from monitoring well GPEC-MW101WT in September 2010, December 2012, and January 2016 with concentrations of 1,060 µg/L (estimated), 291 µg/L, and 224 µg/L, respectively. The concentrations have been consistently decreasing, but remain above the AGWQS of 200 µg/L. Free cyanide was detected in these samples at concentrations of 4 µg/L (estimated), 3 µg/L, and 9 µg/L, respectively.

### *2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from 12 wells in the shallow zone along the Maspeth Alignment Area during the 2024/2025 additional groundwater sampling event (see Table 15). Three shallow samples in the area were analyzed for PFAS (GPEC-GT-4S, GPEC-MW-101WT and GPEC-MW-344S).

Exceedances of targeted compounds during the 2024/2025 additional groundwater sampling event included one or more BTEX and PAH compounds in seven wells. Each of the individual BTEX compounds exceeded the criteria in three of the seven wells with exceedances. PAH exceedances primarily included acenaphthene (two wells) and naphthalene (seven wells), along with several other individual PAH exceedances in one well (GPEC-MW339S). Concentrations above 100 µg/L of total BTEX and total PAHs were identified in six and five wells, respectively, with total concentrations ranging up to 71,660 µg/L (BTEX, GPEC-GT5) and 11,359 µg/L (PAHs, W-2) as shown on Plate 16. The locations of the maximum total BTEX and PAH detections are along the southern edge of the central portion of Area 4, similar to the PDI/RI phase, although generally lower in concentration.

Other VOCs exceeding the AGWQS included 1,2-dichlorobenzene (4.3 µg/L), isopropylbenzene (15 µg/L) and styrene (2,100 µg/L) in GPEC-GT3, as well as isopropylbenzene in W-1, W-2 and GPEC-MW222S with detections of 6 µg/L, 55 µg/L and 14 µg/L, respectively.

Other SVOCs detected above the AGWQS included 4-methylphenol in GPEC-GT3 (4.1 µg/L) and W-2 (1.9 µg/L), as well as phenol in four wells with a maximum detection of 290 µg/L in GPEC-GT4S.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included arsenic, barium, iron, lead, magnesium, manganese, selenium and sodium. Iron, magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Arsenic was detected above the AGWQS of 25 µg/L in GPEC-GT1S (80.2 µg/L) and GPEC-GT3 (132 µg/L). Barium exceedances were identified marginally exceeding the AGWQS of 1,000 µg/L in GPEC-GT4S (1,050 µg/L) and GPEC-GT5 (1,300 µg/L). Lead exceeded the AGWQS of 25 µg/L in GPEC-GT1S with a concentration of 3,270 µg/L. The selenium exceedance of the AGWQS of 10 µg/L was identified in GPE-MW101WT (30.9 µg/L).

PFAS analysis was conducted on three shallow wells along the Maspeth Alignment area during the 2024/2025 additional groundwater sampling event. Exceedances of the human health criteria for PFOS and PFOA were identified for PFOS and PFOA in each of the wells sampled. The maximum detections for PFOS and PFOA were 38.7 ng/L (GPEC-MW101WT) and 89.3 ng/L (GPEC-GT4S).

#### 5.3.3.2. Intermediate (El. -20 to -50 feet)

*RI and PDI Phases*

A total of 13 groundwater samples have been collected from 10 wells in the intermediate zone during the PDI, Phase 1 and Phase 2 of the RI, and the Groundwater Model Investigation (see Table 15). Groundwater exceedances of the targeted compounds in the intermediate zone were identified for BTEX (six wells), PAHs (four wells), and CVOCs (five wells) along the Maspeth Alignment. Higher level detections (above 100 µg/L) of CVOCs were identified in three wells in the western portion of Area 5 as shown on Plate 14. The concentrations of CVOCs may be related to an off-Site source or sources as discussed below. Concentrations of BTEX above 100 µg/L were identified in two small areas along the southern boundary of Area 4 and to the southeast of Holder 1 in Area 5. Concentrations of PAHs above 100 µg/L were limited to a small area to the southeast of Holder 1.

BTEX concentrations ranged from ND in two wells to 4,340 µg/L in GPEC-GT5I, which is located in the same portion of Area 4 where elevated BTEX concentrations were detected in the shallow zone. GPEC-GT5I is screened across an interval with petroleum-related impacts. Benzene (4,280 µg/L) was the main component of the BTEX detections in the GPEC-GT5I sample. Higher level detections (> 100 µg/L) of BTEX were also detected in GPEC-MW332I (196 µg/L), located to the southeast of Holder 1 in Area 5. The primary constituents in this sample were ethylbenzene, total xylenes, and benzene. Lower level BTEX exceedances of the AGWQS were also identified in GPEC-GT01 (maximum of 1.3 µg/L in October 2009), GPEC-GT04D (maximum of 1.94 µg/L in December 2012), GPEC-MW333I (72.324 µg/L), and GPEC-MW344I (2.318 µg/L). The primary constituents in these samples were benzene and ethylbenzene.

Total PAH concentrations ranged from ND in four wells to 450.3 µg/L in GPEC-MW332I. The primary PAH constituent in the GPEC-MW332I sample was naphthalene (286 µg/L). GPEC-MW322I is located in an area where potentially DNAPL-saturated soil was identified, but the screen zone is approximately 15 feet below the lowest visually observed NAPL-related impacts. PAH exceedances of the AGWQS were also identified in the samples collected from wells GPEC-GT5I (44.74 µg/L), GPEC-MW333I (9.923 µg/L), and GPEC-MW344I (0.218 µg/L). The main constituent in the GPEC-GT5I sample was naphthalene, while only benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and/or indeno(1,2,3-cd)pyrene exceeded the AGWQS in the GPEC-MW333I and GPEC-MW344I samples.

Concentrations of CVOCs exceeding the AGWQS in the intermediate zone were identified throughout the southern boundary of Areas 4 and 5. Higher level detections (> 100 µg/L) were identified in the samples collected from monitoring wells in Area 5 including GPEC-MW333I (292.966 µg/L), GPEC-MW339I (163.61 µg/L), and GPEC-MW344I (286.74 µg/L). The main constituents were cis-1,2-DCE, TCE, and PCE.

The location of documented off-Site CVOC plumes in the region is shown in Appendix J (Meeker Avenue Plume Superfund Site). These impacts may be attributable to other current or former sites in the region, whose uses have included dyeing, tanning, printing, machine shops, wood working, and various manufacturing processes. Although not well defined in the off-Site area, groundwater generally flows toward the Site from the west in this region. As such, the concentrations of CVOCs may be the result of an off-Site source or sources. The other exceedances of CVOCs were identified in the central portion of the southern Site boundary in Area 4; however, the concentrations were much lower than the southern and western portions of Area 5 described above (maximum of 17.856 µg/L).

Other VOC concentrations above the AGWQS were limited to methyl tertiary butyl ether (MTBE) in GPEC-MW344I (23.8 µg/L). The AGWQS for MTBE is 10 µg/L. MTBE is an additive to gasoline, and similar to CVOCs, is not associated with the former MGP and is attributed to off-Site gasoline source(s).

Other SVOC exceedances were limited to 4-methylphenol in GPEC-GT01 (maximum of 3.14 µg/L in December 2012), GPEC-MW328I (5.37 µg/L), and GPEC-332I (1.91 µg/L), and phenol in GPEC-GT01 (maximum of 13 µg/L in October 2009), GPEC-GT5I (4.18 µg/L), and GPEC-MW332I (6.31 µg/L). The AGWQS for each of these compounds is 1 µg/L.

There was no detection of PCBs. Free or total cyanide was not detected above the AGWQS.

Metals detections above the AGWQS included barium, iron, magnesium, manganese, sodium, and thallium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Barium (maximum of 1,660 µg/L in December 2012) and thallium (0.544 µg/L [estimated]) were each detected in one well, GPEC-GT01 and GPEC-MW339I, respectively. These detections remained within the same order of magnitude as the AGWQS of 1,000 µg/L and 0.5 µg/L, respectively.

### *2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from 10 wells in the intermediate zone along the Maspeth Alignment Area during the 2024/2025 additional groundwater sampling event (see Table 15). Two intermediate samples in the area were analyzed for PFAS (GPEC-GT-4D and GPEC-MW-344I).

Exceedances of targeted compounds during the 2024/2025 additional groundwater sampling event included one or more BTEX compounds in three wells (GPEC-MW333I, GPEC-GT5I and GPEC-MW306I) naphthalene in two wells (GPEC-Gt5I and GPEC-MW306I) and one or more CVOCs in four wells (GPEC-MW333I, GPEC-MW339I, GPEC-MW344I and GPEC-GT4D). Concentrations above 100 µg/L of total BTEX and total PAHs were limited to one well (GPEC-MW306I), while CVOC concentrations above 100 µg/L were identified in two wells (GPEC-MW333I and GPEC-MW344I) as shown on Plate 17.

Exceedances of BTEX or PAH compounds included benzene (three wells), ethylbenzene and xylenes (one well each), and naphthalene (2 wells). CVOCs exceeding the AGWQS included 1,1-DCA (1 well), cis-1,2-DCE (4 wells), trans-1,2-DCE (2 wells), PCE (1 well) and TCE (two wells), which were identified in a total of four wells.

Other VOC and SVOCs detected above the AGWQS included isopropylbenzene in two wells with a maximum detection of 7.6 µg/L in GPEC-MW306I and phenol with a detection of 7.5 µg/L in the same well.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included barium, iron, lead, magnesium, manganese, selenium and sodium. Iron, magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. One barium and one lead exceedance of the AGWQS were identified in GPEC-GT1 with concentrations of 1,610 µg/L and 96.8 µg/L, respectively. The AGWQS for barium and lead are 1,000 µg/L and 25 µg/L, respectively. The selenium exceedance of the AGWQS of 10 µg/L was identified in GPE-MW333I (63.7 µg/L).

Exceedances of the human health criteria for PFOS and PFOA were identified for PFOS and PFOA in each of the two wells sampled. The maximum detections for PFOS and PFOA were 27.4 ng/L (GPEC-MW344I) and 91.7 ng/L (GPEC-GT4D).

### 5.3.3.3. Deep (>El. -50 feet)

*RI and PDI Phases*

A total of 12 groundwater samples have been collected from nine wells in the deep zone during the PDI and Phase 1 and Phase 2 of the RI (see Table 15). Groundwater exceedances of the targeted compounds in the deep zone were identified for BTEX (three wells), PAHs (two wells), and CVOCs (eight wells) and elevated detections (above 100 µg/L) of CVOCs were identified in four wells in the western portion of Area 4 and in Area 5 (Plate 15). BTEX concentrations above 100 µg/L were identified in two wells located in the southwest corner of Area 5.

BTEX concentrations ranged from ND in 4 wells to 146.4 µg/L in GPEC-MW333D, located in the southern and western portion of Area 5. Elevated BTEX concentrations were also identified in GPEC-MW344D (113.81 µg/L), located in the southwest corner of Area 5. No physical impacts were identified in the screen zone intervals in the associated borings for these wells. The main components of the BTEX detections were benzene and ethylbenzene. Benzene also exceeded the AGWQS of 1 µg/L in the sample collected from GPEC-MW222D (18.9 µg/L). The Aetna Varnish company was previously located in this area and may have contributed to groundwater impacts (Figure 5).

Total PAH concentrations ranged from ND in six wells to 22.055 µg/L in GPEC-MW344D. The main constituent in this sample was naphthalene (17.2 µg/L). PAHs also exceeded the AGWQS in GPEC-MW333D (10.291 µg/L).

Concentrations of CVOCs exceeding the AGWQS in the deep zone were primarily identified in wells throughout the Maspeth Alignment; however, elevated detections (above 100 µg/L) were limited to the southern and western sections of Areas 4 and 5, similar to the intermediate zone locations. The concentrations of CVOCs in this area were generally higher than the intermediate zone. The concentration of CVOCs in this area ranged between 41.99 µg/L in GPEC-MW339D, located to the southwest of Holder 2, to 1,124.7 µg/L in GPEC-MW333D. The main constituents were cis-1,2-DCE, TCE, and PCE, similar to the intermediate zone locations. Similar to the intermediate zone, groundwater flow is generally not well defined in the off-Site area but is believed to flow toward the Site from the west in this area. The intermediate and deep zone CVOC impacts in this area may be related and may be the result of an off-Site source or sources. The concentration of CVOCs in wells on the eastern portion of the Maspeth Alignment (GPEC-MW101I, GPEC-MW-102D, and GPEC-MW306D), which consisted primarily of 1,2-DCA, were relatively low and do not appear to be related to the other detections of CVOCs in wells to the west. The area of elevated detections (> 100 µg/L) consisting primarily of CVOCs is shown on Plate 15.

Detections of other VOCs above the AGWQS were limited MTBE in two wells, GPEC-MW222D (35 µg/L) and GPEC-MW328D (33.9 µg/L). The AGWQS for MTBE is 10 µg/L. Similar to CVOCs, MTBE is not considered to be MGP-related and may be the result of an off-Site source.

There were no detections of other SVOCs or free or total cyanide above the AGWQS. PCBs were not detected.

Metals detections above the AGWQS included iron, magnesium, manganese, sodium, and thallium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Thallium was detected in one well, GPEC-MW339D (1.75 µg/L [estimated]), within one order of magnitude of the AGWQS of 0.5 µg/L.

### *2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from 10 wells in the deep zone along the Maspeth Alignment Area during the 2024/2025 additional groundwater sampling event (see Table 15). Three deep samples in the area were analyzed for PFAS (GPEC-MW101I, GPEC-MW101D and GPEC-MW344D).

Exceedances of targeted compounds during the 2024/2025 additional groundwater sampling event included one or more BTEX compounds in two wells and one or more CVOCs in seven wells. Concentrations above 100 µg/L of total BTEX and CVOCs were limited to one and three wells, respectively. No wells had concentrations of total PAHs exceeding 100 µg/L (Plate 18).

Exceedances of the targeted compounds included all of the BTEX compounds in one well (GPEC-MW333D), as well as benzene in GPEC-MW222D and GPEC-MW344D. CVOCs exceeding the AGWQS included 1,2-DCA (five wells), cis-1,2-DCE (four wells), trans-1,2-DCE (four wells), PCE (one well), TCE (one well) and vinyl chloride (two wells).

Other VOCs detected above the AGWQS included isopropylbenzene in one well (GPEC-MW333D) with a concentration of 8.6 µg/L and MTBE in two wells with a maximum detection of 25 µg/L in GPEC-MW328D.

No other SVOCs were detected above the AGWQS.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included iron, magnesium, manganese, and sodium, all of which are associated with natural conditions and are not associated with historical Site operations.

Exceedances of the human health criteria for PFOS were identified in one of the three wells sampled and exceedances of PFOA were identified in each of the three wells sampled. The maximum detections for PFOS and PFOA were 10.5 ng/L (GPEC-MW101I) and 40 ng/L (GPEC-MW344D).

## *5.3.4. NAPL*

Visual observations of potentially DNAPL-saturated soil in the Maspeth Alignment area was identified in several borings in the vicinity of Holder 1 and in two borings located to the west of the Holder 1 area, as discussed in Section 5.3.2. Visual observations of potentially DNAPL-saturated soil were generally limited to the shallow zone in areas adjacent to Holder 1 but was identified above the intermediate clay and Gardiners clay unit in a limited area to the west (Plates 5, 10, and 11, and Figure 18). NAPL-related impacts in these areas were investigated further to the south of the Site during the Equity RI. No shallow potentially DNAPL-saturated areas were identified within the Equity RI study area. The visual observations of potentially DNAPL-saturated soil identified in the deeper zones to the west on-Site are

attributed to migration from the Equity site. This migration is due to the orientation of the lower permeability confining units in the area which dip generally northward from Equity towards the Site in this area. Further discussion is provided in Section 6. A description of the geology in the area is provided in Section 4 and is shown along the southern boundary on Figure 18.

No measurable NAPL is currently present in any monitoring or recovery wells installed on the Maspeth Alignment. Trace amounts of DNAPL have been visually observed in GPEC-RW332 (Table 5). Historically, LNAPL was present in two wells (W-1 and W-2) in a former gasoline UST area located to the southwest of the Transportation Building, as previously discussed. FP&M investigated the USTs during removal, as discussed in Section 2.6.1, and the USTs tested tight and the tank steel was in excellent condition. FP&M identified naphthalene levels in soil samples below the tank vaults that was not indicative of gasoline. Based on information provided during previous investigations by others at the Site and at off-Site locations, the LNAPL may be from an off-Site source or sources, possibly the BCF site, located hydraulically upgradient of this portion of the GPEC Site. LNAPL has been measured at thicknesses of approximately 4 feet in the northeast corner of the BCF site along Maspeth Avenue, and at thicknesses of approximately 9 feet at a piezometer approximately 100 feet south of Maspeth Avenue on the BCF site.

## 5.4. Site Interior

The interior of the Site is comprised of Areas 3 and 6 through 9. This area was investigated during Phase 1 and Phase 3 of the RI, PDI, Groundwater Model Investigation, and Emerging Contaminant Groundwater Investigation. Additional investigations as part of capital improvement projects were performed in the area. The current and historical uses of these areas are as follows:

Area 3 is surrounded by Areas 4 and 7 and is currently in use as an active gas regulator station. Portions of the SNG plant were formerly located in Area 3.

Area 6 consists of the former Tank Farm in the northwest corner of the Site. Other than the southern portion of this area, which is used for parking and storage for the soil recycling facility, it is not currently in use. During the period of MGP operations (1927 – 1968), Area 6 contained tanks with various oils used in the production of gas. During the end of this period, fuel oil was also stored in the tank farm.

Area 7 includes the area south of the fenced-off LNG Plant to the north of Area 4, and east of Varick Avenue over to Area 2. This area includes a Storage & Service (S&S) Building, Welding Shop, Varick Control House, Buildings 11, 12, and 13, Service Building, a portion of the Stores Building, several smaller structures, roadway, pipe laydown and storage areas, and parking lots. Area 7 previously supported various MGP operations.

Area 8 includes the LNG Plant excluding the Loading Platform Area (Area 2). Between the 1940s and early 1970s, when the LNG facility was built, Area 8 supported various MGP operations.

Area 9 includes the area west of Varick Avenue, between Area 5 (former Maspeth holders) and Area 6 (former Tank Farm). This area includes the Meter Operations Building, the little league ball field on the

southeast corner of the intersection of Vandervoort Avenue and Division Place, and a soil recycling facility. Area 9 supported MGP operations between 1927 and the late 1960s.

The location of the historical MGP-infrastructure is shown on Plate 1.

### *5.4.1. Surface Soil*

A total of 27 surface soil samples were collected within Areas 7 through 9 during Phase 3 of the RI. Exceedances were generally limited to benzo(a)pyrene. One exceedance of dibenz(a,h)anthracene and arsenic was also detected. Benzo(a)pyrene exceeded the IUSCO of 1.1 mg/Kg in five samples collected from Area 8 and three samples collected from Area 9. The maximum detection was 9.72 mg/Kg in sample GPEC-SS312, located to the southwest of LNG Tank 1 in Area 8. An exceedance of the IUSCO for dibenz(a,h)anthracene of 1.1 mg/Kg was also identified in the sample from GPEC-SS312 (1.82 mg/Kg). An exceedance of the IUSCO for arsenic of 16 mg/Kg was identified in the sample from GPEC-SS313 (17.8 mg/Kg), located to the east of LNG Tank 2 in Area 8.

Exceedances of the SCOs in the public ballfield area in Area 9 included one exceedance of the IUSCO of 1.1 mg/Kg for benzo(a)pyrene in GPEC-SS332 (2.44 mg/Kg), which was included above in the discussion of surface soil exceedances in the Site Interior. The RRSCO for benzo(a)pyrene (1 mg/Kg) is similar to the IUSCO of 1.1 mg.Kg. Exceedances of the RRSCO of 1 mg/Kg of benzo(a)anthracene were identified in GPEC-SS329 (1.43 mg/Kg) and GPEC-SS332 (2.4 mg/Kg). Other exceedances of the RRSCOs in the public ballfield area included benzo(b)fluoranthene (3.3 mg/Kg), dibenz(a,h)anthracene (0.624 mg/Kg) and indeno(1,2,3-cd)pyrene(1.26 mg/Kg) in GPEC-SS332 and lead (439 mg/Kg) in GPEC-SS329. The RRSCOs for benzo(b)fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene and lead are 1 mg/Kg, 0.33 mg/Kg, 0.5 mg/Kg and 400 mg/Kg, respectively.

Additional surface soil sampling to delineate exceedance in the former public ballfield area in Area 9 of the Site was conducted on November 4, 2021, and December 16 and 17, 2021. The December 2021 sample locations were based on the results of the November 2021 sampling and were selected in consultation with NYSDEC and NYSDOH.

A total of six locations were sampled from the infield areas of the three ballfields in November 2021 and total of 16 additional locations were sampled in December 2021. The additional sampling was conducted to a depth of 2 feet with samples collected from three intervals including 0 to 2 inches, 0 to 6 inches [volatile organic compounds (VOCs) analysis only] and 2 to 24 inches.

Additional exceedances of the RRSCOs and IUSCOs were identified in the soil samples collected during the 2021 sampling events. The RRSCOs exceedances were generally identified throughout the ballfield area and throughout the sampling zone, while the IUSCOs exceedances were primarily found in the deeper samples in the southernmost ballfield. A full summary of the 2021 sampling events is provided in Appendix G.

It is noted that should the ballfields located in Area 9 be proposed for use in the future, RRSCOs would apply, not the IUSCOs.

## *5.4.2. Subsurface Soils*

The soil analytical results for the Site Interior are shown in Table 12. Soil exceedances for the targeted compounds, along with field observations of impacts are shown for the three depth zones on Plates 6 through 11, respectively.

Due to the number of samples collected, the shallow zone discussion for the Site Interior will be further divided into Areas 3, 6, 7, 8, and 9.

### 5.4.2.1. Shallow (0 – 25 feet bgs)

No visual observations of potentially DNAPL-saturated soil were identified for the Site Interior in the shallow zone in 107 borings and 89 test pits that were advanced. Visual observations of potentially petroleum-saturated soil were only noted in one test pit out of 89 test pits advanced in the area, located in Area 8. Elevated concentrations of total PAHs (>500 mg/Kg) were found in three small areas in the central and western portions of Area 7 (Plate 7); to the east and south of LNG Tank 2 and a small area in the northwest corner of Area 8 (Plates 8 and 9); and a small area in the southern portion of Area 9 (Plate 6).

#### *Field Observations*

A total of 22 borings were advanced within the shallow zone in Area 3 (Plate 3) during Phase 1 of the RI, with 20 borings installed to a depth of up to 8 feet bgs within the proposed Maspeth Regulator Station footprint for soil characterization and reuse. The only impacts identified were petroleum-like odors in four borings out of 22 borings that were advanced. Potential source areas near these locations include the SNG facility.

A total of 12 borings and 18 test pits were advanced in the shallow zone in Area 6 during Phase 1 and Phase 3 of the RI and the Groundwater Model Investigation. No visual observations of potentially DNAPL-saturated soil were identified within the shallow zone of Area 6 in the 12 borings and 18 test pits that were advanced. NAPL impacts identified within the shallow zone were identified in one test pit out of 18 test pits advanced, and were limited to pieces of solid NAPL, soil staining, and a naphthalene-like odor in the 0- to 4-foot interval of test pit GPEC-TP570, located next to a former oil storage tank.

Petroleum-related impacts, which were limited to staining and odors, were identified within the shallow zone of Area 6 in nine test pits (out of 18 test pits advanced in the area): GPEC-TP501, GPEC-TP502, GPEC-TP504 through GPEC-TP509, and GPEC-TP513. These test pits were all either adjoining former storage tanks, utilities associated with the former tanks, or adjoining a former underground oil pump house. No impacts were identified in the shallow zone in any of the 12 borings advanced in the area.

A total of 27 borings and 20 test pits were advanced in the shallow zone in Area 7 (Plate 7) during the PDI, Phases 1 and 3 of the RI, the Groundwater Model Investigation, and a capital improvement project. An additional geotechnical boring (GT- series) was advanced where a CPT was performed. Test pit GPEC-TP403 was advanced along the northern boundary of Area 4 but was intended to investigate impacts within Area 7 and is included in this section. No visual observations of potentially DNAPL-saturated soil were identified within the shallow zone of Area 7 in the 27 borings and 20 test pits

that were advanced. Residual NAPL impacts (blebs, sheen, or coating) were identified in seven borings (out of 27 borings advanced) and three test pits (out 20 test pits advanced). NAPL coating was noted in the 10- to 13.2-foot interval of GPEC-SB409, located in the center of Area 7. NAPL blebs and a sheen were noted in the 0.5- to 5-foot interval of GPEC-TP421, also located in the central portion of Area 7. A sheen was noted in six borings and two test pits: GPEC-SB11/MW-11 (8 to 12 and 18 to 20 feet bgs), GPEC-SB402 (14.3 to 15 feet bgs), GPEC-SB403 (9.1 to 12.9 feet bgs), GPEC-SB405 (8 to 10 feet bgs), GPEC-SB407 (2 feet bgs), GPEC-SB413 (9.2 to 11.4 feet bgs), GPEC-TP406 (7 feet bgs), and GPEC-TP419 (4.5 feet bgs). Lesser impacts (staining or odors) were identified in six borings (out of 27 borings advanced) and one test pit (out of 20 test pits advanced). Potential sources near these locations include a relief holder near GPEC-SB11, gasoline pumps near GPEC-SB402, paint and oil storage near GPEC-SB403 and GPEC-TP406, and a producer gas holder near GPEC\-SB405 and GPEC-TP421.

Petroleum-related impacts (blebs, sheens, staining, or odors) were identified in four borings (out of 27 borings advanced) and four test pits (out of 20 test pits advanced). A sheen was identified in one boring and four test pits: GPEC-SB401 (15 to 17.3 feet bgs), GPEC-TP407 (7 feet bgs), GPEC-TP413 (10.5 feet bgs), GPEC-TP414 (8 feet bgs), and GPEC-TP418 (5 feet bgs). Petroleum staining or odors were noted in borings GPEC-SB06/MW-6, GPEC-SB07/MW-7D, and GPEC-SB412. GPEC-SB401 is located near the gasoline pumps noted above, and GPEC-TP407 is located near the producer gas holder noted above.

A sulfur-like odor was noted in two borings out of 27 borings advanced in the area, including the 8.9- to 25-foot interval (and continuing into the intermediate zone) of GPEC-SB221, located in the western portion of Area 7, and the 11.3- to 12.8-foot interval of GPEC-SB-10/MW-10, located in the southern and central portion of Area 7.

A total of 39 borings and 48 test pits were advanced within the shallow zone in Area 8 (Plates 8 and 9) during the PDI, Phases 1 and 3 of the RI, and capital improvement projects. No visual observations of potentially DNAPL-saturated soil were identified within the shallow zone of Area 8 in the 39 borings and 48 test pits advanced. NAPL coating was noted in three borings out of 39 borings advanced, including the 11- to 12-foot interval of GPEC-SB217, the 15.1- to 16.8-foot interval of GPEC-SB519, and the 20- to 22.4-foot interval of GPEC-SB527. These borings are located to the northeast, south, and east of LNG Tank 2, respectively. Solidified NAPL was noted in two borings (out of 39 borings advanced) and 24 test pits (out of 48 test pits advanced): GPEC-SB520, GPEC-SB521, GPEC-TP517, GPEC-TP518, GPEC-TP520, GPEC-TP522 through GPEC-TP527, GPEC-TP532, GPEC-TP535, GPEC-TP537, GPEC-TP538, GPEC-TP541, GPEC-TP547, GPEC-TP548, GPEC-TP550, GPEC-TP553, GPEC-TP554, GPEC-TP561, GPEC-TP562, GPEC-TP564 through GPEC-TP566. NAPL blebs were identified in one boring out of 39 borings advanced, including the 20- to 25-foot interval, and continuing into the intermediate zone, of GPEC-SB517. Lesser impacts (staining or odors) were identified in nine borings (out of 39 borings advanced) and three test pits (out of 48 test pits advanced). There are numerous potential source areas near these locations within Area 8 (Plate 1), including tar pits to the northeast of LNG Tank 2 (GPEC-SB217, GPEC-TP547, GPEC-TP548, GPEC-TP553, and GPEC-TP554), a tar precipitator and oil storage tank to the southeast of LNG Tank 2 (GPEC-SB519 and GPEC-TP524), salt water condensers (GPEC-SB521 and GPEC-TP527) and a relief holder (GPEC-SB520, GPEC-TP522, and GPEC-TP523) to the south of LNG Tank 2, a separator and a tar separator to east of LNG Tank 2 (GPEC-SB527, GPEC-TP526, and GPEC-TP541), scrubbers to the southeast of LNG Tanks 2 (GPEC-TP520), treatment tanks near GPEC-TP525, an oil storage tank and a residuum oil storage tank to the west of LNG Tank 2 (GPEC-TP537), wet tar storage tanks and batch tar

dehydrators to the east of LNG Tank 2 (GPEC-TP538), a dry tar storage tank to the northeast of LNG Tank 2 (GPEC-TP550), a residual distillate storage tank, crude solvent storage tank, and motor fuel storage tank to the northwest of LNG Tank 2 (GPEC-TP561, GPEC-TP562, and GPEC-TP564 through GPEC-TP566).

Petroleum-related impacts (saturation, blebs, sheens, staining, or odors) were identified in one boring (out of 39 borings advanced) and 11 test pits (out of 48 borings advanced). A visual observation of potentially petroleum-saturated soil was noted in the 6- to 10-foot interval of GPEC-TP528, located to the south of LNG Tank 2 near former saltwater condensers. No potentially petroleum-saturated soil was visually observed in GPEC-SB521, which was advanced next to GPEC-TP528 to further delineate the visually observed potential petroleum saturation. Petroleum blebs and a sheen were noted in the 4- to 6-foot interval of GPEC-TP529. Petroleum staining or odors were noted in GPEC-SB525, GPEC-TP519, GPEC-TP530, GPEC-TP531, GPEC-TP533, GPEC-TP534, GPEC-TP539, GPEC-TP542, GPEC-TP543, and GPEC-TP546. Soil staining and burnt odors were noted in test pits GPEC-TP556, GPEC-TP559, and GPEC-TP560.

A total of seven borings and three test pits were advanced in the shallow zone of Area 9 (Plate 6) during Phases 1 and 3 of the RI and the Groundwater Model Investigation. No NAPL related impacts were identified within the shallow zone of Area 9 in the seven borings and three test pits that were advanced, with the exception of the impacts noted in the borings advanced in the southern portion of Area 9 during the Phase 2 RI in Area 5.

Petroleum-related impacts (sheen, staining, or odors) were identified in three borings (out of seven borings advanced) and three test pits (out of three test pits advanced). A sheen was noted in the 20- to 25-foot interval and continuing into the intermediate zone of GPEC-SB512, the 10- to 15.8-foot interval of GPEC-SB515, and the 10- to 11-foot interval of GPEC-TP567. Petroleum odors or staining were noted in GPEC-SB511, GPEC-TP568, and GPEC-TP569. Potential sources near these locations include vaporizers and a gas test holder near GPEC-SB511 and purifiers near GPEC-SB512 and GPEC-SB515.

Stained blue to bluish green soil was identified in one boring (out of seven borings advanced) and one test pit (out of three test pits advanced), including test pit GPEC-TP568 in the 2- to 4-foot interval and in adjacent boring GPEC-SB512 in the 16.9- to 20-foot interval. This boring and test pit were advanced in the immediate vicinity of the former purifiers, and the staining is likely waste associated with historical operations.

### *Analytical Summary*

One sample was collected from the shallow zone in Area 3 during Phase 1 of the RI. There were no exceedances of the IUSCOs identified in this sample. GEI also collected soil characterization samples in July 2010 and performed a soil reuse sampling program in April 2011 within the proposed Maspeth Regulator Station footprint in Area 3 in support of the construction of the station in 2012. Several PAHs and two metals were detected at concentrations which exceeded the IUSCOs. Data collected from the investigation is included in Appendix J. PAH exceedances area shown on Plate 3. The soil from this area was excavated during the construction of the station and disposed of off-Site at a regulated facility.

A total of 25 samples were collected from the shallow zone in Area 6 during Phases 1 and 3 of the RI. The samples were taken from borings and test pits. Exceedances of the targeted compounds were limited to PAHs. A total of nine (from nine locations) of 25 samples collected exceeded the IUSCOs for at least one PAH compound.

PAH concentrations were identified throughout Area 6 and ranged from ND in five samples to 81.251 mg/Kg in the 4- to 5-foot interval of GPEC-TP509. A petroleum-related staining was noted in the 4- to 6-foot interval of this test pit. Benzo(a)pyrene exceeded the IUSCOs in each of the nine samples where an exceedance was identified with a maximum concentration of 5.63 mg/Kg in the 4- to 5-foot interval from GPEC-TP509. Dibenz(a,h)anthracene was the only other PAH compound to exceed IUSCOs, with a concentration of 1.2 mg/Kg in the 4- to 5-foot interval from GPEC-TP509. The IUSCOs for these compounds is 1.1 mg/Kg.

Metals exceedances of the IUSCOs were limited to arsenic in three samples and mercury in one sample. The maximum concentration of arsenic (75.8 mg/Kg) and mercury (14.5 mg/Kg [estimated]) were detected in the 4- to 5-foot interval from GPEC-TP509. The arsenic and mercury exceedances remained within one order of magnitude of their respective IUSCOs. The maximum concentration of arsenic only slightly exceeded the typical background concentrations in soil in the eastern United States (Table 13). Fill was noted in each of the sampling intervals where a metals exceedance of the IUSCOs was identified. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface. Detections of free cyanide were limited to the sample collected from the 0.5- to 1.5-foot interval from GPEC-TP516, with an estimated concentration of 2.3 mg/Kg. Fill was noted in this sampling interval.

No detections of other VOCs, other SVOCs, PCBs, pesticides, or herbicides were above their respective IUSCOs.

A total of 63 samples were collected from the shallow zone in Area 7 during the PDI, Phases 1 and 3 of the RI, and a capital improvement project. The samples were taken from borings and test pits Exceedances of the targeted compounds were limited to PAHs. A total of 26 (from 21 locations) of 63 samples exceeded the IUSCOs for at least one PAH compound.

PAH concentrations were identified throughout Area 7 and ranged from ND in seven samples to 3,150.51 mg/Kg in the 11- to 12-foot interval from boring GPEC-SB409. NAPL coating was noted in the 10- to 13.2-foot interval of this boring, which is located in the center of Area 7. Elevated PAH concentrations (>500 mg/Kg) were also identified in two small areas in the western portion of Area 7, with detections of 2,392.98 mg/Kg in the 13- to 15-foot interval of GPEC-SB400 and 1,614.6 mg/Kg in the 14- to 15-foot interval of GPEC-SB402. Visual impacts in these intervals included a naphthalene-like odor in GPEC-SB400 and a sheen, staining, and a naphthalene-like odor in GPEC-SB402. Benzo(a)pyrene was the main PAH compound to exceed IUSCOs with lesser concentrations of benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene exceeding the IUSCOs in at least one sample.

Metals exceedances of the IUSCOs were identified for arsenic, mercury, copper, lead, and zinc. Arsenic exceeded the IUSCO of 16 mg/Kg in 15 samples, with a maximum concentration of 1,550 mg/Kg in the

sample collected at 5 feet bgs from boring GPEC-SB412. Mercury exceeded the IUSCOs in four samples, with a maximum concentration of 17.9 mg/Kg in the 9.5- to 10-foot interval from GPEC-TP401. The mercury exceedances remained within one order of the magnitude of the IUSCO. The copper (21,400 mg/Kg), lead (28,200 mg/Kg), and zinc (15,100 mg/Kg) exceedances were detected in the same sample, the 6.5- to 7-foot interval from test pit GPEC-TP403. These exceedances remained within one order of magnitude of the respective IUSCOs. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface. Detections of free cyanide were limited to the sample collected from the 9.5- to 10-foot interval from GPEC-TP401, with an estimated concentration of 3.2 mg/Kg. Fill was noted in this sampling interval.

No detections of other VOCs, other SVOCs, PCBs, pesticides, or herbicides were above their respective IUSCOs.

A total of 95 samples were collected from the shallow zone within Area 8 during the PDI, Phases 1 and 3 of the RI, and capital improvement projects. The samples were taken from borings and test pits. Exceedances of the targeted compounds were limited to PAHs. A total of 58 (from 53 locations) of 95 samples exceeded the IUSCOs for at least one PAH compound.

PAH concentrations ranged from ND in 13 samples to 14,662.9 mg/Kg in the 2- to 3-foot interval from GPEC-TP538. PAH compounds exceeding the IUSCOs included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.

Due the number of locations in Area 8 with PAH exceedances, which were generally found throughout the area, the discussion will focus on elevated total PAH concentrations (>500 mg/Kg). Concentrations of total PAHs above 500 mg/Kg were identified in 20 samples from 19 locations (Plates 8 and 9). The locations with elevated total PAH concentrations were primarily located to the south and east of LNG Tank 2. A small area of elevated total PAH concentrations was also identified in the northwest corner of Area 8. All of the locations with elevated total PAH concentrations were within NAPL-impacted or petroleum-impacted areas, discussed above, which may explain the elevated PAH exceedances.

Metals exceedances of the IUSCOs were identified for arsenic (maximum of 32.4 mg/Kg [estimated] in 10- to 12-foot interval from GPEC-SB08 duplicate), cadmium (382 mg/Kg in 5- to 6-foot interval from GPEC-TP531), lead (5,170 mg/Kg in 3- to 4-foot interval from GPEC-SB519), mercury (maximum of 16.2 mg/Kg in 2- to 3-foot interval from GPEC-TP532), nickel (145,000 mg/Kg in 0- to 1-foot interval from GPEC-TP562), and zinc (11,600 mg/Kg in 0- to 1-foot interval from GPEC-TP562). Arsenic exceeded the IUSCOs in 13 samples, mercury exceeded the IUSCOs in two samples, and the remaining metals exceeded the IUSCOs in one sample each. All of the metals exceedances were within one order of magnitude of the respective IUSCOs. The arsenic concentrations were within typical background concentrations in soil in the eastern United States (Table 13). All of the metals exceedances of the IUSCOs, with the exception of an exceedance of arsenic from boring GPEC-SB08, were collected from intervals where fill was noted. The arsenic exceedance of the IUSCO in GPEC-SB08, collected from the 10- to 12-foot interval, was only identified in the duplicate sample; the parent sample did not exceed the IUSCO. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface.

Detections of free cyanide were limited to three samples (from three locations), with a maximum concentration of 8.7 mg/Kg in the 3- to 4-foot interval from test pit GPEC-TP556. Fill was noted in the sampling interval in each of the three locations.

No detections of other VOCs, other SVOCs, PCBs, pesticides, or herbicides were above their respective IUSCOs.

A total of 13 samples were collected from the shallow zone within Area 9 during Phases 1 and 3 of the RI. The samples were taken from borings and test pits. Exceedances of the targeted compounds were limited to PAHs. A total of seven (from seven locations) of 13 samples exceeded the IUSCOs for at least one PAH compound.

PAH concentrations were identified throughout Area 9 and ranged from 0.071 mg/Kg to 4,990.45 mg/Kg in the 10- to 11-foot interval from GPEC-TP567, located in the southern portion of Area 9. Petroleum-related impacts including a sheen, soil staining, and odor were identified in this sampling interval. No other elevated concentrations of total PAHs (>500 mg/Kg) were identified in Area 9. Benzo(a)pyrene was the primary PAH compound to exceed IUSCOs. Excluding the sample taken from the 10- to 11-foot interval from GPEC-TP567 noted above, PAH exceedances in the remaining samples were limited to a maximum of two compounds.

Metals exceedances of the IUSCOs were limited to arsenic, lead, and mercury. Arsenic exceeded the IUSCOs in six samples while lead and mercury exceeded the IUSCOs in one sample each. All of the metals exceedances were within the same order of magnitude as the respective IUSCOs. The arsenic concentrations were within typical background concentrations in soil in the eastern United States (Table 13). The detection of lead exceeding the IUSCO was identified in the duplicate sample (5,000 mg/Kg [estimated]) in the 15- to 16-foot interval from GPEC-SB515, but the concentration in the parent sample did not exceed the IUSCO. The IUSCO for lead is 3,900 mg/Kg. Similarly, the detection of mercury exceeding the IUSCO was identified in the parent sample (5.73 mg/Kg) in the 4- to 5-foot interval from GPEC-SB512, but the concentration in the duplicate sample did not exceed the IUSCO. The IUSCO for mercury is 5.7 mg/Kg. The maximum concentration of arsenic, 50.3 mg/Kg, was detected in the 3- to 4-foot interval from GPEC-TP568. All of the metals exceedances of the IUSCOs were in samples collected from intervals where fill was noted. Arsenic may be related to former coal heating operations or urban fill similar to other metals found within the shallow subsurface.

Detections of free cyanide were limited to three samples (from three locations), with a maximum concentration of 29.4 mg/Kg in the 3- to 4-foot interval from GPEC-TP568. Fill was noted in the sampling interval in each of the three locations.

No detections of other VOCs, other SVOCs, or pesticides were above their respective IUSCOs. PCBs and herbicides were not detected.

#### 5.4.2.2. Intermediate (25 to 60 feet bgs)

No potentially DNAPL-saturated soil was visually observed in the intermediate zone in the Site Interior. No physical impacts were identified within the intermediate zone of Areas 3 and 6. No elevated concentrations of total PAHs (>500 mg/Kg) were identified in the Site Interior (Plate 10).

## *Field Observations*

A total of 80 borings were advanced into the intermediate zone in the Site Interior during the PDI, Phases 1 and 3 of the RI, the Groundwater Model Investigation, and capital improvement projects. An additional geotechnical boring (GT- series) was advanced in Area 7 where a CPT was performed. No potentially DNAPL-saturated soil was visually observed within the intermediate zone. Residual NAPL impacts (blebs, sheen, or coatings) were limited to five borings. NAPL coating was identified in the 43.5- to 46.8-foot interval of GPEC-SB528, located in the central and southern portion of Area 8. NAPL blebs were identified in the 25- to 25.7-foot interval of GPEC-SB517 (continuing from the shallow zone), the 30- to 34-foot interval of GPEC-SB522, and the 26.9- to 30-foot and the 40- to 45.5-foot intervals of GPEC-SB531. These borings are located in Area 8. A sheen was identified in the 25- to 30-foot interval of GPEC-SB409, located in the center of Area 7. Lesser impacts (staining or odors) were identified in 13 borings located in Areas 7 and 8. Potential source areas near these locations include a separator, tar treatment tanks, a boiler fuel storage tank near GPEC-SB528, and a tar pit and dry tar storage tank near GPEC-SB531.

Petroleum-related sheen, soil staining, and a petroleum-like odor were identified in the 25- to 30.6-foot interval of GPEC-SB512, located in the eastern portion of Area 9. Petroleum-related soil staining was identified in the 25- to 30-foot interval of GPEC-SB412, located in the central and northern portion of Area 7.

A sulfur-like odor was noted in the 25- to 32.7-foot interval of GPEC-SB221, located in the western portion of Area 7.

## *Analytical Summary*

A total of 27 samples were collected from the intermediate zone of the Site Interior during the PDI, Phases 1 and 3 of the RI, and capital improvement projects. The samples were taken from borings. Exceedances of the targeted compounds were limited to PAHs. A total of two (from two locations) of 27 samples collected exceeded the IUSCOs for at least one PAH compound.

PAH concentrations ranged from ND in 16 samples to 290.08 mg/Kg in the 30- to 31-foot interval from GPEC-SB522. The only other sample that exceeded the IUSCOs for PAHs was the sample from the 29- to 30-foot interval from GPEC-SB512, with a concentration of 26.033 mg/Kg. These samples were collected from intervals with NAPL-related or petroleum-related impacts discussed above. The PAH compounds to exceed IUSCOs were benzo(a)pyrene, benzo(a)anthracene, and dibenz(a,h)anthracene.

Metals exceedances of the IUSCOs were limited to arsenic in the sample collected from the 31- to 32-foot interval of GPEC-SB803, with a concentration of 131 mg/Kg. This boring is located next to LNG Tank 1 in the eastern portion of Area 8. The IUSCO for arsenic is 16 mg/Kg. Arsenic detections may be related to urban fill or former coal heating operations. Metals below the shallow fill zone are unlikely to be related to historical Site operations.

No detections of other VOCs or other SVOCs were above their respective IUSCOs.

PCBs or free cyanide were not detected.

#### 5.4.2.3. Deep (>60 feet bgs)

*Field Observations*

A total of 62 borings were advanced into the deep zone in the Site Interior during the PDI, Phases 1 and 3 of the RI, the Groundwater Model Investigation, and capital improvement projects. Physical impacts were limited to naphthalene-like odors noted in three borings within Area 8 and one boring within Area 7, as well as a musty-like odor in one boring within Area 6.

*Analytical Summary*

A total of 56 samples were collected from the deep zone within the Site Interior during the PDI, Phases 1 and 3 of the RI, and capital improvement projects. Samples were collected from borings. No exceedances of the targeted compounds were identified.

Metals exceedances were limited to a slight exceedance of the IUSCO for arsenic in the sample collected from the 85- to 86-foot interval of boring GPEC-SB522, with a concentration of 17.8 mg/Kg. This boring is located to the southeast of LNG Tank 2 in Area 8. The IUSCO for arsenic is 16 mg/Kg. This exceedance is within typical background concentrations in soil in the eastern United States (Table 13). Arsenic detections may be related to urban fill or former coal heating operations. Metals below the shallow fill zone are unlikely to be related to historical Site operations.

No other VOCs, other SVOCs, or PCBs were above their respective IUSCOs.

Free cyanide was not detected.

### *5.4.3. Groundwater*

The groundwater sampling results for the Site Interior are shown in Table 16. Groundwater exceedances for the targeted compounds are shown for the three depth zones on Plates 13, 14, and 15, respectively. Groundwater exceedances are shown similarly for the 2024/2025 additional groundwater sampling event on Plates 16 through 18.

Groundwater flow in the shallow, intermediate and deep zones is discussed in Sections 4.2.1, 4.2.2 and 4.2.3, respectively. Groundwater elevation contours for the shallow, intermediate, and deep aquifer zones are presented on Figures 20 through 31. Groundwater flow in the northern and central sections, particularly in the shallow and intermediate zones, of the Site Interior is likely affected by groundwater withdrawal systems operated by the responsible parties under NYSDEC's direction. The withdrawal is likely responsible for the relatively flat groundwater gradients in this area of the Site.

#### 5.4.3.1. Shallow (<El. -20 feet)

*RI and PDI Phases*

A total of 29 groundwater samples were collected from 20 wells in the shallow zone of the Site Interior during the PDI and Phases 1 and 3 of the RI. Groundwater exceedances of the targeted compounds in the shallow zone were identified for BTEX (three wells), PAHs (two wells), and CVOCs (10 wells) in the

Site Interior. Concentrations above 100 µg/L were limited to total PAHs and total CVOCs in two wells and four wells, respectively. The estimated area of elevated total PAH impacts (>100 µg/L) encompasses Area 3 and extends into a small area in the southern portion of Area 7, and a second small area is present in the northwest portion of Area 7. The estimated area of elevated total CVOC impacts (>100 µg/L) encompasses the northwest corner of Area 9, the northern portion of Area 6, and the northwest corner of Area 8. The elevated CVOCs above 100 µg/L may be related to an off-Site source or sources as discussed below (Plate 13).

BTEX exceedances of the AGWQS were limited to wells GPEC-MW-12 in both the July 2009 (46.8 µg/L) and December 2012 (42.83 µg/L) samples, GPEC-MW201 (35.3 µg/L), and GPEC-MW221S (73.9 µg/L). These wells are located within relatively close proximity to each other in Area 3 and the western portion of Area 7. The primary constituent to exceed AGWQS was benzene, with lesser concentrations of total xylenes and ethylbenzene. The AGWQS for these constituents is 1 µg/L, 5 µg/L, and 5 µg/L, respectively.

PAH exceedances of the AGWQS were limited to wells GPEC-MW-12 (142.146 µg/L) in the December 2012 sample and GPEC-MW201 (577 µg/L). Naphthalene exceeded the AGQWS in both samples with a maximum concentration of 470 µg/L in GPEC-MW201. Acenaphthene also exceeded the AGQWS in the sample from GPEC-MW201. The AGWQS for these compounds is 10 µg/L and 20 µg/L, respectively.

CVOC exceedances of the AGWQS were primarily located along the northern and western boundaries of the Site Interior, with the exception of exceedances identified in monitoring well GPEC-MW201 located in Area 3. Elevated concentrations of total CVOCs (>100 µg/L) were identified in wells MW-2 in the July 2009 (3,249 µg/L) and December 2012 (563.61 µg/L) samples, MW-3 in the July 2009 (156.3 µg/L) and December 2012 (132.11 µg/L) samples, GPEC-MW505S (137.619 µg/L), and GPEC-MW514 (461.87 µg/L). These elevated concentrations of CVOCs are located in the northwest corner of the Site in the vicinity of a previously documented off-Site CVOC plume consisting of numerous sources (Appendix J). The primary constituent to exceed AGWQS was PCE.

Other SVOC detections were limited to an estimated detection of 2-methylphenol (9.4 µg/L) in the sample collected from GPEC-MW201. The AGWQS for 2-methylphenol is 1 µg/L. GPEC-MW201 was located within Area 3 and was removed during the soil excavation project for the Maspeth Regulator Station construction.

PCBs were not detected in any of the samples collected. Other VOCs and free or total cyanide were not detected above the AGWQS in any of the samples collected in the shallow zone of the Site Interior.

Total metals detections above the AGWQS included antimony, barium, chromium, iron, lead, magnesium, manganese, sodium, and thallium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. The antimony (maximum of 75.5 µg/L from GPEC-MW221S), barium (maximum of 2,690 µg/L in July 2009 sample from GPEC-MW12), chromium (386 µg/L from GPEC-MW537), lead (maximum of 38 µg/L from GPEC-MW217S), and thallium (6.2 µg/L [estimated] from GPEC-MW201) concentrations remained within one order of magnitude of the respective AGWQS.

*2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from 16 wells in the shallow zone in the Site Interior during the 2024/2025 additional groundwater sampling event (see Table 16). Six shallow samples in the area were analyzed for PFAS (GPEC-MW1S, GPEC-MW217S, GPEC-MW220S, GPEC-MW221S, GPEC-MW513S and GPEC-MW537).

Exceedances of targeted compounds during the 2024/2025 additional groundwater sampling event included benzene, ethylbenzene, xylenes and naphthalene in monitoring well GPEC-MW12, as well as PCE in four wells. The BTEX and PAH detections in GPEC-MW12 represent the only detections of BTEX compounds in shallow wells in the area during the 2024/2025 additional groundwater sampling event. Concentrations above 100 µg/L of targeted compounds were limited to total PAHs in GPEC-MW12 and CVOCs in GPEC-MW514 (Plate 16).

CVOCs exceeding the AGWQS were limited to PCE in four wells with a maximum detection of 100 µg/L in GPEC-MW514, located along the northern (upgradient) Site boundary.

Other VOCs or SVOCs detected above the AGWQS were limited to carbon disulfide with a detection of 250 µg/L in GPEC-MW221S and 1,4-dichlorobenzene with a detection of 3.4 µg/L in GPEC-MW12.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included antimony, arsenic, barium, iron, magnesium, manganese, selenium and sodium. Iron, magnesium, manganese and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Antimony was detected above the AGWQS of 3 µg/L in GPEC-MW221S (60.4 µg/L) and GPEC-MW217S (4.3 µg/L). Arsenic and barium detections above the AGWQS were limited to two wells with concentrations of 46.2 µg/L (GPEC-MW221S) and 3,220 µg/L (GPEC-MW12), respectively. Selenium exceedances of the AGWQS of 10 µg/L were identified in MW-2 (10.6 µg/L) and GPEC-221S (25.7 µg/L).

Exceedances of the human health criteria for PFOS and PFOA were identified for PFOS and PFOA in each of the six wells sampled. The maximum detections for PFOS and PFOA were 37.9 ng/L (GPEC-MW513S) and 237 ng/L (GPEC-MW537), both of which are located near the Site boundary.

### 5.4.3.2. Intermediate (El. -20 to -50 feet)

*RI and PDI Phases*

A total of 14 groundwater samples were collected from 10 wells in the intermediate zone of the Site Interior during the PDI and Phases 1 and 3 of the RI (see Table 16). A total of two groundwater samples, one each from GPEC-MW-11 and GPEC-MW220I, were also collected during the Emerging Contaminant Groundwater Investigation. Groundwater exceedances of the targeted compounds in the intermediate zone were identified for BTEX (one well), PAHs (two wells), and CVOCs (six wells). Concentrations above 100 µg/L were limited to CVOCs in two wells. The estimated area of elevated total CVOC impacts (>100 µg/L) encompasses two small areas along the northern and western Site boundaries. The elevated CVOCs above 100 µg/L may be related to an off-Site source or sources as discussed below (Plate 14).

BTEX exceedances of the AGWQS were limited to the July 2009 (85.3 µg/L) and December 2012 (1.05 µg/L) samples collected from GPEC-MW-11. This well is located in the northern and central portion of Area 7 and is screened across an interval with identified lesser NAPL-related impacts (staining and odors). Benzene exceeded the AGWQS in both samples, while toluene, ethylbenzene, and total xylenes only exceeded the respective AGWQS in the July 2009 sample. The concentrations in this well decreased significantly between the two sampling events.

PAH exceedances of the AGWQS were limited to detections of naphthalene in the samples collected from GPEC-MW-11 (52 µg/L) in July 2009 and GPEC-MW217I (10.3 µg/L). The AGWQS for naphthalene is 10 µg/L. GPEC-MW217I is located in the center of Area 8 and is screened across an interval with lesser NAPL-related impacts (odors).

CVOC exceedances of the AGWQS were primarily located along the northern and western boundaries of the Site Interior, with the exception of exceedances identified in monitoring wells GPEC-MW-8, located in the eastern portion of Area 8, and GPEC-MW221I, located in the western portion of Area 7. Chloroform (15 µg/L) was the only CVOC to exceed AGWQS in the July 2009 sample from GPEC-MW-8. Chloroform was ND in the December 2012 sample from this well. Elevated concentrations of total CVOCs (>100 µg/L) were identified in samples collected from wells GPE-MW-1D (200.6 µg/L) in July 2009 and GPEC-MW513D (938.919 µg/L). These elevated concentrations of CVOCs are located along the northern and western Site boundaries and may be attributable to an off-Site source or sources potentially including a previously documented off-Site CVOC plume discussed above. The primary constituent to exceed AGWQS was PCE, with the exception of the GPEC-MW513D sample. The main constituent in this sample was 1,2-DCA.

Other SVOCs or free or total cyanide were not detected above the AGWQS. PCBs were not detected in any of the samples collected from the intermediate zone in the Site Interior.

Exceedances of total metals included iron, magnesium, manganese, sodium, and thallium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. Thallium detections above the AGWQS of 0.5 µg/L were limited to samples collected from wells GPEC-MW-8 (2.29 µg/L) in December 2012 and GPEC-MW-10 (0.948 µg/L [estimated]) in the duplicate sample from December 2012. Thallium was not detected in the GPEC-MW-10 parent sample from December 2012.

The concentration of PFOA detected in GPEC-MW220I (97.5 ng/L) was above the groundwater screening level of 70 ng/L. Perfluorooctanesulfonic Acid (PFOS) was detected in this well at a concentration of 57.9 ng/L, which is above the drinking water screening level of 20 ng/L. The total PFAS concentrations in wells GPEC-MW-11 and GPEC-MW220I were 51.55 ng/L and 256.17 ng/L, respectively, which is below the screening level of 500 ng/L for total PFAS. No PFAS compounds were detected above screening levels in the sample collected from GPEC-MW-11. 1,4-dioxane was ND in the samples collected from both wells.

*2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from eight wells in the intermediate zone in the Site Interior during the 2024/2025 additional groundwater sampling event; seven of which were analyzed for PFAS (see Table 16). Exceedances of the AGWQS, or concentrations above 100 µg/L were limited to CVOCs during the 2024/2025 additional groundwater sampling event in the intermediate zone of the Site Interior area (Plate 17).

CVOCs exceeding the AGWQS included one detection of 1,2-DCA in GPEC-MW513D (580 µg/L), one detection of cis-1,2-DCE in GPEC-MW221I (22 µg/L), three detections of PCE and two detections of TCE. The maximum PCE and TCE detections were observed in GPEC-MW513D with concentrations of 110 µg/L and 89 µg/L, respectively. Total CVOC detections above 100 µg/L were limited to GPEC-MW513D, which is located along the western (upgradient) Site boundary.

No other VOCs or SVOCs were detected above the AGWQS.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included iron, magnesium, manganese, and sodium, all of which are associated with natural conditions and are not associated with historical Site operations.

Exceedances of the human health criteria for PFOS and PFOA were identified in six and seven of the wells sampled, respectively. The maximum detections for PFOS and PFOA were 41.6 ng/L (GPEC-MW220I) and 82.3 ng/L (GPEC-MW221I). GPEC-MW221I is located near the western Site boundary and GPEC-MW220I is located on the western portion of the Site and downgradient of GPEC-MW221I.

### 5.4.3.3. Deep (>El. -50 feet)

*RI and PDI Phases*

A total of 11 groundwater samples were collected from nine wells in the deep zone of the Site Interior during the PDI and Phases 1 and 3 of the RI (see Table 16). Groundwater exceedances of the targeted compounds were identified for PAHs (one well) and CVOCs (nine wells). No exceedances of BTEX were identified. Concentrations above 100 µg/L were limited to CVOCs in four wells. The estimated area of elevated total CVOC impacts (>100 µg/L) encompasses the northwest portion of the Site, an area along the northern Site boundary, and an area in the southwest portion of the Site that extends into the Site Interior from the Maspeth Alignment. The elevated CVOCs above 100 µg/L may be related to an off-Site source or sources as discussed below (Plate 15).

Several PAH exceedances of the AGWQS were identified in the sample collected from GPEC-MW-7D, located in the eastern portion of Area 7, totaling 1.606 µg/L. Naphthalene-like odors were identified within the screen zone of this well.

CVOC exceedances of the AGWQS were identified in each of the nine wells sampled within the deep zone in the Site Interior. In five of the wells, GPEC-MW-11D, GPEC-MW219D, GPEC-MW220D,

GPEC-MW502, and GPEC-MW505D, the only CVOC exceeding the AGWQS was 1,2-DCA, which reached a maximum concentration of 607 µg/L in GPEC-MW219D. Other elevated detections of total CVOCs above 100 µg/L in the deep zone in the Site Interior were identified in the samples collected from GPEC-MW217D (123.97 µg/L), GPEC-MW502 (551.695 µg/L), and GPEC-MW505D (299.391 µg/L). PCE was the main component detected in the GPEC-MW217D sample. The elevated CVOC detections in the deep zone of the Site Interior were located near the northern and western Site boundaries and may be the result of an off-Site source or sources potentially including a previously document off-Site plume in the area (Plate 15).

Other VOC detections above the AGWQS were limited to acetone (70.6 µg/L) and 2-butanone (89 µg/L) in the sample collected from GPEC-MW502. The AGWQS for both of these compounds is 50 µg/L.

Total PCBs exceeded the AGWQS in the sample collected from GPEC-MW-7D in December 2012 with a concentration of 0.69 µg/L. The AGWQS for total PCBs is 0.09 µg/L. PCBs were not detected in this well in a sample collected in July 2009. The exceedance in monitoring well GPEC-MW-7D may have been due to entrained sediment in the sample. The turbidity in the sample was approximately 150 NTUs, which is 15 times above the desired value of 10 NTUs. GPEC-MW-7D was planned for resampling of PCBs in early 2016; however, it was determined that the well was destroyed, and sample collection was therefore not possible. PCBs were not detected in any of the other samples collected from the deep zone in the Site Interior.

No detections of other SVOCs or free or total cyanide were above the AGWQS in any of the samples collected in the deep zone.

Metals exceedances included copper, iron, lead, magnesium, manganese, and sodium. Iron, magnesium, manganese, and sodium content in groundwater are associated with natural conditions and are not associated with historical Site operations. The exceedances of copper (302 µg/L) and lead (371 µg/L) were both from the GPEC-MW-7D sample from December 2012. As discussed above, these exceedances may be due to entrained sediment in this sample.

### *2024/2025 Additional Groundwater Sampling Event*

Groundwater samples were collected from nine wells in the deep zone in the Site Interior during the 2024/2025 additional groundwater sampling event; six of which were analyzed for PFAS (see Table 16). Exceedances of the AGWQS, or concentrations above 100 µg/L of targeted compounds in the intermediate zone of the Site Interior area were limited to CVOCs during the 2024/2025 additional groundwater sampling event(Plate 18).

CVOCs exceeding the AGWQS included 7 detections of 1,2-DCA with concentrations ranging up to 67 µg/L (GPEC-MW502), one detection of cis-1,2-DCE and TCE in GPEC-MW221D (32 µg/L and 25 µg/L, respectively) and three detections of PCE ranging up to 51 µg/L, in GPEC-MW221D. Total CVOC detections above 100 µg/L were limited to GPEC-MW221D, which is located along the western (upgradient) Site boundary.

No other VOCs or SVOCs were detected above the AGWQS.

PCBs were not detected in any of the samples collected.

Dissolved metals detections above the AGWQS included iron, magnesium, manganese, and sodium, all of which are associated with natural conditions and are not associated with historical Site operations.

Exceedances of the human health criteria for PFOS and PFOA were identified in each of the six wells sampled. The maximum detections for PFOS and PFOA were 46.8 ng/L and 97.9 ng/L, both of which were detected in GPEC-MW220D. GPEC-MW220D is located on the western portion of the Site and downgradient of other identified areas of PFAS impacts.

### *5.4.4. NAPL*

No potentially DNAPL-saturated soil has been visually observed in the 107 borings or 89 test pits advanced within the Site Interior and no measurable NAPL has been visually observed in any monitoring wells installed within the area. A visual observation of potentially petroleum-saturated soil was noted in one test pit out of 89 test pits advanced, the 6- to 10-foot interval of GPEC-TP528, located to the south of LNG Tank 2 near former saltwater condensers in Area 8. No visual observations of potentially petroleum-saturated soil were noted in GPEC-SB521, which was advanced next to GPEC-TP528 to further delineate the visually observed potential petroleum saturation. Further discussion of NAPL presence and mobility is presented in Section 8.3.

## 5.5. Soil Vapor Intrusion Assessment

The SVI analytical results for the Site are presented in Table 17. The SVI sample locations are shown on Figure 14. A total of 38 SS, 39 IA, and 21 OA samples were collected from a total of 14 Site buildings (four large and 10 small). The samples were collected during an initial sampling event (March 2018), first resampling event (March 2019), and second resampling event (June 2019). The number of samples and the location of the samples collected in the resampling events were dictated by the results of the previous sampling event. In each resampling event, the number of samples collected was significantly reduced. One additional sampling event was conducted in February 2021, in accordance with recommendations included in the initial transmittal of the draft RI report (January 2020).

The evaluation of the findings was focused on potentially MGP-related or petroleum-related impacts, based on the historical usage of the Site. However, other noteworthy detections, particularly those of compounds regulated by the SVI Guidance document, are also evaluated using the NYSDOH matrices within the SVI Guidance. The regulated compounds include chlorinated compounds, some of which have been detected in on-Site groundwater that has been attributed to an off-Site source or sources.

The evaluation was performed for each of the 14 buildings and discussed separately below.

The SVI Investigation Summary report, SVI Investigation Resampling Summary report, the Additional SVI Sampling Summary report and the Routine Soil Vapor Intrusion Summary reports are included as Appendix H.

### *5.5.1. Facilities Building (Building 21)*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at the Facilities Building during the initial sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels.

Although relatively low and below the AGV, the NYSDOH matrix recommendation based on the concentration of TCE (1.3 µg/m$^3$ in SV, 1.8 µg/m$^3$ in IA) is to identify sources and resample or mitigate.

The Facilities Building was resampled during the first resampling event due to the detections of TCE. A total of one SS sample, one co-located IA sample, and one OA sample were collected.

The concentration of TCE (730 µg/m$^3$ in SV, 1,800 µg/m$^3$ in IA) exceeded its AGV in IA, the BASE 90$^{th}$ percentile value, and were significantly higher than the concentrations from the initial sampling event. The NYSDOH recommendation based on the concentration of TCE is to mitigate. TCE was identified as a component in at least one item in the sampling inventory. Chlorinated compound 1,1-DCE (ND in SV, 2.6 µg/m$^3$ in IA) also exceeded the BASE 90$^{th}$ percentile values. 1,1-DCE did not exceed the BASE 90$^{th}$ percentile value during the initial sampling event. The NYSDOH matrix recommended action for 1,1-DCE is to identify sources and resample or mitigate.

Chlorinated compounds chloroform (1.4 [estimated] µg/m$^3$ in SV, 1.8 µg/m$^3$ in IA) and 1,1,2-trichloroethane (ND in SV, 3.0 µg/m$^3$ in IA) exceeded the BASE 90$^{th}$ percentile values. These compounds are not regulated by the SVI Guidance. These compounds did not exceed the BASE 90$^{th}$ percentile values during the initial sampling event.

Consistent with the initial sampling event, potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels.

A second resampling event was conducted at the Facilities Building due to the elevated concentrations of TCE. A total of one SS sample, one co-located IA sample, and one second floor IA sample, and one OA sample were collected. Two Summa canisters were collected at each sample location and the canisters were sent to two different laboratories (Phoenix Environmental Laboratories, Inc. and Eurofins TestAmerica, Inc.) for analysis.

No AGVs were exceeded during the second resampling event. Based on the TCE detections (3.1 and 4.7 µg/m$^3$ in SV, 0.44 and 0.51 µg/m$^3$ in 1$^{st}$ floor IA, and 0.56 and 0.44 µg/m$^3$ in 2$^{nd}$ floor IA), which were significantly lower than the first resampling event and generally consistent with the initial sampling event, no further action is recommended according to the NYSDOH matrices. No further action was recommended based on the detections of 1,1-DCE (ND in all samples).

The methylene chloride detections (ND in SV, 17.3 µg/m$^3$ in 1$^{st}$ floor IA, and 14.9 µg/m$^3$ in 2$^{nd}$ floor IA [9.41 µg/m$^3$ in OA]) from Phoenix, exceeded the BASE 90$^{th}$ percentile values and the resulting NYSDOH recommended action would be to identify sources and resample or mitigate. However, based on the methylene chloride (2.1 µg/m$^3$ in SV, 3.8 µg/m$^3$ in 1$^{st}$ floor IA, 5.4 µg/m$^3$ in 2$^{nd}$ floor IA [1.7 µg/m$^3$ in OA])

detections from Eurofins TestAmerica, which did not exceed the BASE 90$^{th}$ percentile values, no further action is recommended by the NYSDOH matrices. It is likely that the detections of methylene chloride in the Phoenix samples were the result of laboratory contamination.

A soil sample and a groundwater sample were collected to the south of the Facilities Building and analyzed for VOCs to examine if a TCE source area is present in the building vicinity. The soil sample was collected from directly above the water table, which was encountered at approximately 4 feet bgs. A slight naphthalene-like odor was noted in soil in the 3 to 4 feet bgs interval, but no PID readings above background were noted. No other visual impacts, odors, or PID readings above background were noted in the soil.

TCE was not detected in both the soil and groundwater samples. Acetone was the only VOC detected in the soil sample above the UUSCOs. No VOCs were detected in the groundwater sample above the AGWQS.

Based on the results of the February 2021 sampling event, which included TCE detections (1.1 micrograms per cubic meter [µg/m3] in SS, and 1.5 µg/m3 in IA) and methylene chloride at concentrations (7.8 µg/m3 in SS and 13 µg/m3 in IA), the recommended actions include the identification of sources and resampling or mitigation. TCE and methylene chloride were both identified in the building inventory.

Although the recommended action based on the NYSDOH matrices was for continued sampling, mitigation was planned for the Facilities Building (Building 21) as a conservative safety measure

### *5.5.2. Transportation Building (Building D)*

A total of four SS samples, four co-located IA samples, and one OA sample were collected during the sampling event at the Transportation Building.

Potentially MGP- or petroleum-related chemicals detected included carbon disulfide (4 to 5,700 µg/m$^3$ in SV, 0.09 to 0.38 µg/m$^3$ in IA), pentane (ND to 30,000 µg/m$^3$ in SV, 4.2 to 49 µg/m$^3$ in IA), n-undecane (ND to 17 [estimated] µg/m$^3$ in SV, ND to 33 µg/m$^3$ in IA), n-hexane (3 to 32,000 µg/m$^3$ in SV, 3 to 11 µg/m$^3$ in IA), and 2,2,4-trimethylpentane (1 to 340,000 µg/m$^3$ in SV, ND to 14 µg/m$^3$ in IA). The elevated concentrations were primarily detected in SV. Of these, only n-undecane and n-hexane were above the BASE 90$^{th}$ percentile values in two and one IA samples, respectively. A BASE 90$^{th}$ percentile value for pentane was not established.

Other elevated detections included acetone (79 to 84,000 [estimated] µg/m$^3$ in SV, 9.2 to 540 µg/m$^3$ in IA), butane (4.8 to 18,000 µg/m$^3$ in SV, 6.2 to 140 µg/m$^3$ in IA), cyclohexane (ND to 14,000 µg/m$^3$ in SV, 0.33 [estimated] to 3 µg/m$^3$ in IA), ethanol (610 to 32,000 [estimated] µg/m$^3$ in SV, 20 to 130 µg/m$^3$ in IA), 1-heptene (6.7 [estimated] to 3,600 [estimated] µg/m$^3$ in SV, ND to 46 µg/m$^3$ in IA), and 2-butanone (12 to 9,700 [estimated] µg/m$^3$ in SV, 0.78 [estimated] to 4.1 µg/m$^3$ in IA). Detections above BASE 90$^{th}$ percentile values were limited to acetone in one IA sample.

The majority of the elevated detections of potentially MGP- or petroleum-related or other compounds were identified in the samples taken from the southwest side of the building (GPEC-316 location). USTs

were previously removed outside the building in an area adjacent to this sample location. Free product (LNAPL) has also been historically noted in monitoring wells in the vicinity.

Detections of chlorinated compounds within the mitigation range of the NYSDOH matrices were identified for several compounds. All the samples within the mitigation range were taken from the southwest side of the building (GPEC-316 location). They included TCE (2,800 [estimated] µg/m$^3$ in SV, ND in IA), cis-1,2-DCE (3,900 µg/m$^3$ in SV, ND in IA), PCE (6,100 [estimated] µg/m$^3$ in SV, 0.42 [estimated] µg/m$^3$ in IA), 1,1,1-TCA (1,100 [estimated] µg/m$^3$ in SV, 0.087 [estimated] µg/m$^3$ in IA), and methylene chloride (12,000 µg/m$^3$ in SV, 1 µg/m$^3$ in IA). None of the AGVs were exceeded. PID readings taken from the SV point were high at this location (213.7 ppm at sample start and 2,689 ppm at sample finish).

The recommended action for the Transportation Building (Building D) is mitigation due to concentrations of TCE, cis-1,2-DCE, PCE, 1,1,1-TCA and methylene chloride at the GPEC-316 location.

### *5.5.3. Stores Building (Building C)*

A total of four SS samples, four co-located IA samples, and one OA sample were collected at the Stores Building during the initial sampling event.

Potentially MGP- or petroleum-related detections above the BASE 90$^{th}$ percentile values were identified at one sample location, GPEC-IA320, located in the equipment room on the southwest side of the building. The compounds exceeding included ethylbenzene (9.9 µg/m$^3$ in IA), o-xylene (11 µg/m$^3$ in IA), m&p-xylene (38 µg/m$^3$ in IA), n-decane (25 µg/m$^3$ in IA), n-dodecane (21 µg/m$^3$ in IA), and n-undecane (45 µg/m$^3$ in IA). Excluding n-decane, the corresponding SV detections were lower than the IA detections at the GPEC-320 location.

PCE also exceeded the BASE 90$^{th}$ percentile value in sample GPEC-IA320 (ND in SV, 19 µg/m$^3$ in IA). Based on the IA concentration of PCE, the NYSDOH matrix recommended action is to identify sources and resample or mitigate. Based on the 1,1,1-TCA (150 to 13,000 µg/m$^3$ in SV, ND to 4 µg/m$^3$ in IA) detections, the NYSDOH matrix recommended action is mitigation at the GPEC-319 and GPEC-320 locations. 1,1,1-TCA was also detected in the method blank at these locations. None of the AGVs were exceeded.

Based on the PCE detection at GPEC-IA320 and the 1,1,1-TCA detections at GPEC-SV319 and GPEC-SV320, along with the 1,1,1-TCA detections in the method blank, the GPEC-319 and GPEC-320 locations were resampled during the first resampling event. A total of two SS samples, two co-located IA samples, and one OA sample were collected during the first resampling event.

The previous detection of PCE above the BASE 90$^{th}$ percentile value at the GPEC-IA320 location was not replicated in the first resampling event. Based on the PCE (ND in SV, 1.5 to 4.1 µg/m$^3$ in IA) detections, the NYSDOH matrix recommendation is no further action.

Elevated concentrations of 1,1,1-TCA in SV were replicated at both SV sampling locations in the first resampling event. Based on the 1,1,1-TCA (7,500 to 8,800 µg/m$^3$ in SV, ND to 2.2 µg/m$^3$ in IA) detections, the NYSDOH matrix recommended action is mitigation at the GPEC-319 and GPEC-320 locations.

Potentially MGP- or petroleum-related detections above the BASE 90th percentile values were identified at both IA locations, GPEC-IA319 and GPEC-IA320. The compounds exceeding included n-decane (100 µg/m$^3$ in IA320), n-undecane (32 [estimated] and 42 [estimated] µg/m$^3$ in IA319 and IA320, respectively), and styrene (2.7 µg/m$^3$ in the IA319 duplicate). None of these compounds were detected in the corresponding SS samples. n-Decane and n-undecane also exceeded the BASE 90th percentile values in the GPEC-IA320 sample during the initial SVI sampling event. Detections of ethylbenzene, o-xylene, and n-dodecane above the BASE 90th percentile values were not replicated in the GPEC-IA320 sample in the first resampling event.

Other compounds detected above the BASE 90th percentile values included acetone (100 µg/m$^3$ in the IA319 duplicate) and 2-butanone (17 µg/m$^3$ in IA320). These compounds were not detected in the corresponding SS samples.

The recommended action for the Stores Building (Building C) is mitigation due to concentrations of 1,1,1-TCA at the GPEC-319 and GPEC-320 locations.

### *5.5.4. Building 11*

A total of two SS samples, two co-located IA samples, and one OA sample were collected at Building 11 during the initial sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90th percentile levels.

Elevated concentrations of chlorinated compounds were identified in the SV location on the eastern side of the building (GPEC-SV310) and included TCE (1,300 µg/m$^3$ in SV, 1.2 µg/m$^3$ in IA), 1,1-DCE (220 µg/m$^3$ in SV, ND in IA), and 1,1,1-TCA (7,800 µg/m$^3$ in SV, 4.1 µg/m$^3$ in IA). None of the AGVs were exceeded; however, based on the NYSDOH matrices, mitigation is recommended for the above-referenced compounds at the GPEC-310 location. 1,1-DCA (860 µg/m$^3$ in SV, 0.29 [estimated] µg/m$^3$ in IA), a chlorinated compound not regulated by the NYSDOH matrices within the SVI Guidance, was also detected at an elevation concentration at the GPEC-310 location.

The GPEC-310 location was resampled at Building 11 during the first resampling event due to the detections of TCE, 1,1-DCE, and 1,1,1-TCA. A total of one SS sample, one co-located IA sample, and one OA sample were collected.

Elevated concentrations of chlorinated compounds were identified in the SV at levels similar to those found in the initial sampling event. These included TCE (1,700 µg/m$^3$ in SV, 0.97 µg/m$^3$ in IA), 1,1-DCE (180 µg/m$^3$ in SV, ND in IA), and 1,1,1-TCA (6,400 µg/m$^3$ in SV, 3.4 µg/m$^3$ in IA). None of the AGVs were exceeded; however, based on the NYSDOH matrices, mitigation is recommended for the above-referenced compounds at the GPEC-310 location. 1,1-DCA (580 µg/m$^3$ in SV, 0.28 [estimated] µg/m$^3$ in IA), a chlorinated compound not regulated by the NYSDOH matrices within the SVI Guidance, was also detected at an elevated concentration at the GPEC-310 location.

Consistent with the initial sampling event, potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90th percentile levels.

The recommended action at Building 11 is mitigation due to concentrations of TCE, 1,1-DCE and 1,1,1-TCA at the GPEC-310 location.

### *5.5.5. Gatehouse (Building A)*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at the Gatehouse during the initial sampling event.

Potentially MGP- or petroleum-related detections were relatively low and were below the BASE 90$^{th}$ percentile levels. Ethanol (240 µg/m$^3$ in SV, 2,600 µg/m$^3$ in IA) and isopropyl alcohol (9.6 µg/m$^3$ in SV, 17,000 µg/m$^3$ in IA) exceeded the respective BASE 90$^{th}$ percentile values.

None of the AGVs were exceeded; however, based on the concentrations of methylene chloride (two [estimated] µg/m$^3$ in SV, 21 [estimated] µg/m$^3$ in IA), the NYSDOH matrix recommendation is to identify sources and resample or mitigate. Methylene chloride is a common laboratory contaminant.

The Gatehouse was resampled during the first resampling event due to detections of methylene chloride in SV and IA. A total of one SS sample, one co-located IA sample, and one OA sample were collected.

The concentration of methylene chloride (3.5 [estimated] µg/m$^3$ in SV, 2.8 [estimated] µg/m$^3$ in IA) was significantly lower than in the initial sampling event. No further action is recommended based on the NYSDOH matrices. Based on the TCE (1 µg/m$^3$ in SV, 1.1 µg/m$^3$ in IA) detections, the NYSDOH recommended action is the identify sources and resample or mitigate. TCE was not detected in the SV or IA during the initial sampling event. No sources of TCE were identified in the product inventory.

Consistent with the initial sampling event, potentially MGP- or petroleum-related detections were relatively low and IA detections were generally below the BASE 90$^{th}$ percentile levels. Ethanol (200 µg/m$^3$ in SV, 3,600 µg/m$^3$ in IA) and isopropyl alcohol (2.6 µg/m$^3$ in SV, 490 µg/m$^3$ in IA) exceeded the respective BASE 90$^{th}$ percentile values.

Based on the results of the February 2021 sampling event, which included methylene chloride (6.1 µg/m$^3$ in IA) and TCE (ND in IA) and the historical SV sampling results, the NYSDOH matrix recommendation was no further action.

The recommended action at the Gatehouse (Building A) is to identify sources and resample or mitigate due to concentrations of TCE.

### *5.5.6. LNG Guard House*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at the LNG Guard House during the initial sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels with two exceptions.

Ethanol (610 µg/m$^3$ in SV, 12,000 µg/m$^3$ in IA) exceeded the BASE 90$^{th}$ percentile value of 210 µg/m$^3$ in IA. Methylene chloride (0.97 µg/m$^3$ in SV, estimated at 110 µg/m$^3$ in IA) exceeded the BASE 90$^{th}$ percentile value of 10 µg/m$^3$ in the IA and was above the AGV of 60 µg/m$^3$. Based on the NYSDOH matrices, the recommended action to address the methylene chloride detections would be to identify sources and resample or mitigate. Methylene chloride is a common laboratory contaminant.

The LNG Guard House was resampled during the first resampling event due to the detection of methylene chloride in IA above the AGV. A total of one SS sample, one co-located IA sample, and one OA sample were collected.

The concentration of methylene chloride (1.1 [estimated] µg/m$^3$ in SV, 1.8 µg/m$^3$ in IA) in IA was significantly lower than in the initial sampling event and was below the AGV.

Consistent with the initial sampling event, potentially MGP- or petroleum-related detections were relatively low and IA detections were generally below the BASE 90$^{th}$ percentile levels. Ethanol (320 µg/m$^3$ in SV, 2,800 µg/m$^3$ in IA) and isopropyl alcohol (6.6 µg/m$^3$ in SV, 270 µg/m$^3$ in IA) exceeded the BASE 90$^{th}$ percentile values.

No exceedances of the AGVs were identified during the resampling event and no further action is recommended at the LNG Guard House.

### *5.5.7. LNG North Storage Building*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at LNG North Storage Building during the initial sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels.

Concentrations of 1,1,1-TCA (720 µg/m$^3$ in SV, 0.086 [estimated] µg/m$^3$ in IA) and Freon 11 (590 µg/m$^3$ in SV, 1.5 µg/m$^3$ in IA) were elevated in SV, but low in IA. None of the AGVs were exceeded; however, the NYSDOH matrix recommendation based on the carbon tetrachloride (6 µg/m$^3$ in SV, 0.34 µg/m$^3$ in IA [0.43 µg/m$^3$ in OA]) concentrations is to monitor.

The LNG North Storage building was resampled during the first resampling event due to elevated detections of 1,1,1-TCA in SV and carbon tetrachloride in SV and IA. Freon 11 was also detected at an elevated level in SV in the initial sampling event. A total of one SS sample, one co-located IA sample, and one OA sample were collected.

Consistent with the initial sampling event, concentrations of 1,1,1-TCA (780 µg/m$^3$ in SV, ND in IA) was elevated in SV. Concentrations of carbon tetrachloride (4.7 [estimated] µg/m$^3$ in SV, 0.48 µg/m$^3$ in IA [0.52 µg/m$^3$ in OA]) were similar to, but lower than the prior sampling event.

Also, consistent with the initial sampling event, potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels. Freon 11 (410 µg/m$^3$ in SV, 2.2 µg/m$^3$ in IA) was again elevated in SV.

No exceedances of the AGVs were identified and no further action is recommended at the LNG North Storage Building.

### *5.5.8. Service Building (Building B)*

A total of four SS samples, four co-located IA samples, and one OA sample were collected at the Service Building during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels, excluding ethanol. Ethanol exceeded the BASE 90$^{th}$ percentile value (220 to 620 µg/m$^3$ in SV, 210 to 1,200 µg/m$^3$ in IA) in three of the four IA samples. There were no exceedances of the AGVs.

No exceedances of the AGVs were identified and no further action is recommended at the Service Building (Building B).

### *5.5.9. LNG South Storage Building*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at LNG South Storage Building during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels. Concentrations of Freon 11 (5,800 µg/m$^3$ in SV, 2.3 µg/m$^3$ in IA) and Freon 113 (930 µg/m$^3$ in SV, 0.72 µg/m$^3$ in IA) were elevated in SV but low in IA.

No exceedances of the AGVs were identified and no further action is recommended at the LNG South Storage Building.

### *5.5.10. LNG Control House*

A total of two SS samples, two co-located IA samples, and one OA sample were collected at the LNG Control House during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90$^{th}$ percentile levels excluding one detection of chloroform. Chloroform (1.2 µg/m$^3$) slightly exceeded the BASE 90$^{th}$ percentile value of 1.1 µg/m$^3$ in one IA sample.

No exceedances of the AGVs were identified and no further action is recommended at the LNG Control House.

### *5.5.11. Meter Operations Building*

A total of four SS samples, four co-located IA samples, and one OA sample were collected at the Meter Operations Building during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and IA detections were below the BASE 90th percentile levels excluding one detection of dichlorodifluoromethane. Dichlorodifluoromethane (17 µg/m$^3$) slightly exceeded the BASE 90th percentile value of 16.5 µg/m$^3$ in one IA sample. SV levels of dichlorodifluoromethane ranged between 500 to 1,700 µg/m$^3$.

No exceedances of the AGVs were identified and no further action is recommended at the Meter Operations Building.

### *5.5.12. Building 12*

A total of two SS samples, two co-located IA samples, and one OA sample were collected at Building 12 during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90th percentile levels.

No exceedances of the AGVs were identified and no further action is recommended at Building 12.

### *5.5.13. S&S Building (Building 19)*

A total of one SS sample, one co-located IA sample, and one OA sample were collected at the S&S Building during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90th percentile levels.

No exceedances of the AGVs were identified and no further action is recommended at the S&S Building (Building 19).

### *5.5.14. Welding Shop (Building 18)*

A total of two SS samples, two co-located IA samples, and one OA sample were collected at the Welding Shop during the sampling event.

Potentially MGP- or petroleum-related detections were relatively low, and all IA detections were below the BASE 90th percentile levels.

No exceedances of the AGVs were identified and no further action is recommended at the Welding Shop (Building 18).

A summary of recommended actions based on the results of the initial and resampling results, where applicable, is provided in the table below.

| Building | Building Resampled (Yes/No) | NYSDOH Matrix Recommended Action |
|---|---|---|
| Transportation Building (Building D) | No | Mitigation due to concentrations of TCE, cis-1,2-DCE, PCE, 1,1,1-TCA and methylene chloride |
| Stores Building (Building C) | Yes | Mitigation due to concentrations of 1,1,1-TCA |
| Building 11 | Yes | Mitigation due to concentrations of TCE, 1,1-DCE and 1,1,1-TCA |
| Gatehouse (Building A) | Yes | No further action |
| LNG Guard House | Yes | No further action |
| LNG North Storage Building | Yes | No further action |
| Facilities (Building 21) | Yes | Mitigate as a conservative safety measure |
| Service Building (Building B) | No | No further action |
| LNG North Storage Building | No | No further action |
| LNG Control House | No | No further action |
| Meter Operations Building | No | No further action |
| Building 12 | No | No further action |
| Service & Storage Building (Building 19) | No | No further action |
| Welding Shop (Building 18) | No | No further action |

### *5.5.15. Mitigation and Monitoring*

Following the evaluations discussed above, further investigation of the Transportation, Stores and Facilities Buildings and Building 11 was performed to facilitate mitigation design plans. As part of this work, a PDI work plan dated July 29, 2021, was drafted and subsequently approved by NYSDEC and NYSDOH on August 4, 2021.

PDI activities commenced in August with the collection of SS SV samples in the four buildings. Following the receipt of the analytical results, National Grid discussed the results with NYSDEC and NYSDOH and confirmed the locations for pilot testing and associated VMPs in each building. Pilot testing including the collection of effluent samples was conducted in March 2022.

Following the pilot testing, National Grid evaluated the feasibility of installing SSDSs at each of the four buildings referenced above. Factors considered for system design and placement included occupancy and use of the buildings, slab thickness, ROIs, IA quality, and the building insulation envelope (tighter the envelope, the more likely SV could be pulled into the building due to vacuums generated during the heating season). The recommendations for each building were discussed with NYSDEC and NYSDOH and were included in a December 6, 2022, report titled “Soil Vapor Mitigation Pre-Design Investigation Summary & Sub-Slab Depressurization Report”, which was approved by the agencies on December 7, 2022. The recommendations from the report are summarized below.

#### Building 11 and Facilities

SSDSs are recommended for Building 11 and Facilities for the following reasons:

- The buildings are used primarily for offices and storage.

- Pilot testing indicated adequate ROIs will be generated and due to the larger ROIs, construction of the systems will be minimally intrusive.
- Buildings have a standard/moderate building envelope for their usage and age of construction.

## Transportation and Stores Buildings

Periodic monitoring is recommended for the Transportation Building and the Stores Building. This recommendation is based on the following factors:

- The buildings are used primarily for fleet maintenance (Transportation Building) and Storage (Stores Building).
- Pilot testing indicated limited ROIs will be generated. Due to the larger building footprints and limited ROIs, construction of the systems will be very intrusive and require between 500 feet (Transportation Building) and 1000 feet (Stores Building) of horizontal trenching cut through each buildings floor slab.
- The buildings have very loose building envelopes due to the presence of multiple garage doors and industrial type windows, age of construction, high ceilings, and poor insulation.
- Slab thicknesses generally a minimum of 8 inches in the Transportation Building and 18 inches in the Stores Building, providing protection from vapor intrusion and making saw cutting infeasible at the Stores Building.
- Operational schedules in the two buildings which are conducted a minimum of 6 days a week and are critical to National Grid Gas Operations.
- Lack of usable support columns to route system piping.

Due to the size and complexity of the potential system installations in the Transportation and Stores Buildings, the duration of the system installations in these buildings could be significant. The extended duration of installation could potentially create an exposure pathway to IA, which is not currently affected by SVI, during and potentially after installation is completed.

As stated above, periodic monitoring in lieu of system installation was recommended for the Transportation and Stores Building. Annual monitoring in the heating season was proposed for the Transportation Building and the eastern half of the Stores Building. Semi-annual monitoring was proposed for the western portion of the Stores Building due to elevated concentrations of 1,1,1-TCA in sampling points GPEC-SV319 and GPEC-SV320. Concentrations of 1,1,1-TCA reached a maximum of 13,000 ug/$m^3$ and 11,000 ug/$m^3$ in the two points respectively, during the RI. Concentrations at these locations during the PDI were 8,100 ug/$m^3$ and 12,000 ug/$m^3$, respectively.

The periodic monitoring in these buildings was recommended to be conducted at the following points in each building along with indoor and outdoor ambient air sampling.

Installation of the SSDSs was conducted between August and October 2023. Startup of the two systems was conducted in September 2023. A construction completion report summarizing the system startups was submitted to the agencies on December 29, 2023.

Post-startup monitoring activities initially included daily fan vacuum and flow monitoring of the systems and effluent sampling at the conclusion of the first week of operation. Following the completion of the start-up period these activities are conducted on a quarterly basis and summarized in annual reports.

Periodic monitoring is ongoing in the Transportation and Stores buildings in accordance with the approved plan. Since monitoring began, the sampling results have continued to indicate that SVI is not occurring. As such, no additional measures are necessary at this time.

# 6. Qualitative Human Health Exposure Assessment

This section of the RI assesses the potential for exposure to constituents present in impacted soils, groundwater, SV, and IA. This assessment identifies the potential release and transport mechanisms for the constituents of concern (COCs), point of exposure and exposure routes, and the receptors that could be exposed to COCs originating from the Site. It is assumed that direct contact with NAPL will pose an unacceptable risk and will not be evaluated as part of the QHHEA. The evaluation follows guidelines specified in the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010).

## 6.1. Site Setting

A full description of the Site setting is provided in Section 2 of this report.

## 6.2. Exposure Assessment

Exposure is the process by which humans come in contact with constituents in their environment. Humans can be exposed to constituents in a variety of environmental media including surface soil, subsurface soil, SV, groundwater and ambient/IA. Exposure to these media can potentially occur through several routes including ingestion, dermal contact, and inhalation. The exposure assessment identifies likely pathways by which humans are potentially exposed to COCs.

The assessment includes the following:

- Discussion of potential sources and an evaluation of the on-Site data.
- Discussion of potential release mechanisms.
- Identification of potential human exposure points, exposure routes and receptor populations.

Commercial and industrial properties in the vicinity of the Site obtain drinking water from municipal sources. Municipal sources in the area obtain water from upstate surface water and not from local groundwater. Therefore, the potential for exposure to Site-derived constituents in drinking water has not been considered further in this assessment as it is not considered likely to be a complete exposure pathway.

Impacts at the Site have been noted in surface soil, subsurface soil, SV and to a limited extent in IA. Routes of exposure to these impacts can occur through direct contact or ingestion to soil or groundwater and inhalation of IA. No migration of NAPL associated with the Site has been identified that could migrate to the nearby surface water or sediments. No known migration pathways (subsurface, overland or storm sewer) for PCB contamination to either Newtown Creek or English Kills have been identified. Dissolved phase groundwater impacts primarily including BTEX and PAHs; however, may have migrated beyond the Site to the surface water and sediments. These impacts are considered to have minimally impacted surface water and sediment of the adjacent water bodies that have been designated as a

CERCLA site for which remedial options are being evaluated. It should be noted that the exposure routes are considered potential unless there is an ongoing or documented exposure.

## *6.2.1. Potential Sources*

Surface soil (2014, 2017, and 2018), subsurface soil (2009 through 2012 and 2014 through 2019), groundwater (2009 through 2012, 2015 through 2017, and 2019) and air (2018 and 2019) including SS vapor, IA and ambient air samples have been collected from the Site and adjacent area and analyzed for a range of constituents. Available analytical data were compared to New York State recommended standards and guidance values on a sample-by-sample basis. Comparison tables are presented in Section 5 of this report. The results of these comparisons are summarized below. Due to the size of the Site and similar to the other sections of this report, the QHHEA discussion of surface and subsurface soils, as well as groundwater has been divided by area. The Areas include the Loading Platform Area (Areas 1 and 2), the Maspeth Alignment (Areas 4 and 5) and the Site Interior (Areas 3, and 6 through 9). The subsurface soil and groundwater discussions are further divided by depth zones.

### 6.2.1.1. Surface Soil

Analytical data for surface soil (0 to 0.5 ft bgs) are summarized in Table 9. Benzo(a)pyrene, arsenic, and dibenz(a,h)anthracene were the only constituents with concentrations above the IUSCOs, which are applicable for the Site. Exceedances of additional PAHs, as well as total PCBs, two pesticides and six metals were above the UUSCOs in the public ballfield area.

#### *Loading Platform Area (Areas 1 & 2)*

A total of three surface soil samples were collected in Area 2. No samples were collected in Area 1. Exceedances were limited to benzo(a)pyrene in one sample.

#### *Maspeth Alignment (Areas 4 & 5)*

- Three surface soil samples were collected in Area 5 and one was collected in Area 4 along the Maspeth Alignment. Exceedances were limited to benzo(a)pyrene and arsenic. Benzo(a)pyrene exceeded the IUSCO in each of the samples. A slight exceedance of the IUSCO for arsenic was identified in one duplicate sample located in the vegetated area near the Control House in Area 4.

#### *Site Interior (Areas 3, 6-9)*

- A total of 27 surface soil samples were collected in the Site Interior. One was collected in Area 7, 11 were collected in Area 8, and 15 were collected in Area 9. Similar to the other areas described above, the exceedances were primarily limited to benzo(a)pyrene and included five in Area 8 and three in Area 9. Exceedances of arsenic and dibenz(a,h)anthracene were also identified in one sample each in Area 8. Exceedances of the RRSCOs were also identified in the public ballfield area, which is part of Area 9. Additional exceedances of the RRSCOs and the IUSCOs were identified in the former public ballfield area in supplemental samples collected in 2021.

### 6.2.1.2. Subsurface Soil

Analytical data for the subsurface soil samples are summarized in Tables 10, 11, and 12 for the Loading Platform Area, the Maspeth Alignment, and the Site Interior, respectively. The depths have been divided into shallow, intermediate and deep zones and include soils between 0 to 25 feet bgs (excluding surficial soil less than one foot), 25 to 60 feet bgs, and greater than 60 feet bgs, respectively. The shallow zone is the most likely zone where exposure pathways could be completed. Exposure to shallow soil would most likely result from construction activities undertaken at the Site; therefore, construction workers would be the most likely to be directly exposed to chemical constituents reported in shallow soils.

*Loading Platform Area (Areas 1 & 2)*

- Exceedances of the IUSCOs were largely comprised of PAHs and consisted of all of the 17 PAHs for which standards have been established excluding benzo(g,h,i)perylene. PAH exceedances were identified throughout the area and within each zone, but generally decreased in frequency and magnitude with depth. A total of 19, 16 and 8 samples exceeded the IUSCO for at least one PAH compound in the shallow, intermediate and deep zones, respectively.
- No exceedances of BTEX were identified in any of the three depth zones.
- Inorganics exceedances included arsenic, which was identified throughout the area in 19 samples (six in the shallow zone), as well as one exceedance each for cadmium and mercury in the shallow zone, in the northern and central sections of Area 2.
- No exceedances were identified for pesticides, herbicides, or PCBs.

*Maspeth Alignment (Areas 4 & 5)*

- Exceedances of the IUSCOs in subsurface soil were largely comprised of PAHs and were primarily identified in the shallow zone. A total of 110 samples (38 and 72 samples in Areas 4 and 5, respectively) located throughout the Areas, exceeded the IUSCO for at least one PAH compound in the shallow zone. PAH compounds exceeding the IUSCO included benzo[a]anthracene, benzo[b]fluoranthene, benzo[k]fluoranthene benzo[a]pyrene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, fluoranthene, phenanthrene, and pyrene.
- Exceedances of BTEX compounds were limited the shallow zone and included two samples and one sample, in Areas 4 and 5, respectively. The BTEX compounds exceeding the IUSCOs included benzene, ethylbenzene, and total xylene.
- Metals exceedances in the shallow zone were limited to arsenic (44 samples), lead (five samples), and mercury (19 samples) within both Areas 4 and 5, as well one exceedance for manganese and zinc in Area 4. Arsenic exceedances were also identified in one sample in both the intermediate and deep zones in Area 5.
- No exceedances were identified for pesticides, herbicides, or PCBs.

*Site Interior (Areas 3, 6-9)*

- Exceedances of the IUSCOs were largely comprised of PAHs and were primarily identified in the shallow zone. A total of 100 samples in the shallow zone and two samples in the intermediate zone exceeded the IUSCO for at least one PAH compound. The PAH exceedances were generally identified throughout the Site Interior. PAH compounds exceeding the IUSCOs included benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, naphthalene, phenanthrene, and pyrene.
- Metals exceedances were identified for arsenic (37 samples), mercury (eight samples), lead (three samples), zinc (two samples), copper (one sample), cadmium (one sample), and nickel (one sample) in the shallow zone. Arsenic exceedances were also identified in one sample in the intermediate and deep zones.
- No exceedances were identified for BTEX pesticides, herbicides or PCBs.

### 6.2.1.3. Groundwater

Similar to the soil discussion, the groundwater findings are discussed by region and have been further divided into three depth zones: shallow, intermediate, and deep. The shallow, intermediate and deep zones are defined as approximately El. -20 feet above msl, El. -20 to -50 feet above msl, and greater than El. -50 feet above msl, respectively. Groundwater flow in the three depth zones is described in Section 4.2. Analytical data for groundwater samples are presented on Tables 14, 15, and 16 for the respective Site Areas. The shallow zone is the only zone where exposure pathways could be completed on-Site.

*Loading Platform Area (Areas 1 &2)*

- BTEX, PAHs, CVOCs, total cyanide, and metals concentrations in samples collected from shallow monitoring wells located in the Loading Platform Area were detected at concentrations exceeding AGWQS. Acetone and nitrobenzene were detected in the intermediate zone.
- Benzene exceeded the AGWQS in four shallow wells. Ethylbenzene and xylenes also exceeded the AGWQS in one additional shallow well. Three of the four wells are located in the southern portion of the Loading Platform Area. BTEX compounds exceeding the AGWQS in the intermediate or deep zones were identified in seven additional wells.
- Shallow PAH detections above the AGWQS were limited to two wells in the southern portion of the Loading Platform Area and included acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and naphthalene. Additional PAH exceedances were identified in 10 wells located in either the intermediate or deep zones.
- CVOCs detected above the AGWQS in the shallow zone were limited to one detection of 1,1-DCE in the southern portion of Area 2. Other VOCs, primarily including CVOCs, were detected in the intermediate and deep zones. Those detected above the AGWQS in the intermediate and deep zones included acetone, 1,2-DCA, cis-1,2-DCE, PCE, TCE, and vinyl chloride. CVOCs and acetone are not associated with MGP operations.

- Inorganic compounds detected at concentrations exceeding AGWQS were identified in eight shallow wells located throughout the Area and included arsenic, iron, lead, magnesium, manganese, and sodium. Arsenic and lead detections were limited to two wells each. Barium and thallium were also each detected above the AGWQS in one shallow zone well. Additional detections of arsenic, iron, led, magnesium, manganese and sodium were also identified in the intermediate and deep zones.
- Total cyanide was detected in two shallow, one intermediate, and one deep well above the AGWQS.
- PFOA was detected above the drinking water screening level in one intermediate well in the southern portion of Area 2.
- No PCBs were detected above the AGWQS in the Loading Platform Area.

### *Maspeth Alignment (Areas 4 & 5)*

- BTEX, PAHs, other VOCs, other SVOCs, total PCBs, total cyanide, and metals concentrations were detected at concentrations exceeding AGWQS in samples collected from shallow monitoring wells located in the Maspeth Alignment area. Excluding total PCBs, similar compounds were also detected in the intermediate and deep zones. CVOCs were also detected in the intermediate and deep zones in this Area.
- BTEX compounds exceeding the AGWQS were detected in seven shallow wells generally located throughout the Maspeth Alignment and within each depth zone. Each of the individual BTEX compound exceeded the AGWQS in at least one shallow well in the Area. The highest exceedances of BTEX were present in the shallow zone in the central section of Area 4 along the southern property boundary. These BTEX exceedances may be related to an off-Site source or sources but may be comingled with Site-related impacts. BTEX exceedances were identified in an additional nine wells in the intermediate or deep zones in the Area.
- Individual PAHs including acenaphthene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and naphthalene were detected at concentrations exceeding the AGWQS in eight shallow wells. The highest concentrations were within Area 4. Exceedances in the intermediate and deep zones included an additional six wells.
- Other VOCs exceeding the AGWQS in the shallow zone were identified in three wells and included styrene, acetone, and carbon disulfide. The concentrations of styrene were detected in one well in the central section of Area 4 along the southern property boundary and may be related to an off-Site source. VOCs exceeding the AGWQS in the intermediate and deep zones primarily included CVOCs. The highest CVOC values were present within the deep zone near the southwestern corner of the Site. MTBE was also identified in three wells along the southern property boundary. CVOCs, acetone, and MTBE are not associated with MGP operations.
- Other SVOCs including 2,4-dimethylphenol and phenol were detected above the AGWQS in one and two wells, respectively. Intermediate and deep zone exceedances also included phenolic compounds.

- Total PCBs were detected above the AGWQS in two shallow wells, one in Area 4 and one in Area 5. The exceedance in the Area 5 well may have been the result of entrained sediment in the sample. Concentrations of total PCBs in the well located in Area 4 were below the AGWQS when the well was resampled. The Area 5 well has not been resampled to date.
- Inorganic compounds detected at concentrations exceeding AGWQS in shallow wells included arsenic in two wells, beryllium, cadmium, chromium, copper, and zinc in one well, lead in four wells, as well as iron, magnesium, manganese, and sodium in several wells. Additional exceedances of barium, thallium, iron, magnesium, manganese, and sodium were identified in intermediate and/or deep wells.
- Total cyanide has been detected above the AGWQS in one shallow well in the eastern portion of Area 4.

### *Site Interior (Areas 3, 6-9)*

- BTEX, PAHs, CVOCs, other SVOCs and metals concentrations in samples collected from shallow monitoring wells located in the Site Interior were detected at concentrations exceeding AGWQS. Additional exceedances of other VOCs and total PCBs were identified in the deep zone. PFOA and PFOS were detected above the groundwater screening level and the drinking water screening level, respectively in the intermediate zone.
- BTEX compounds exceeding the AGWQS were detected in three shallow wells in the Site Interior. Benzene and ethylbenzene exceeded the AGWQS in each of the shallow wells with exceedances and total xylene exceeded the AGWQS in two of the three shallow wells with exceedances. Additional BTEX exceedances were identified in one intermediate well in the Site Interior.
- PAH exceedances in shallow wells in the Site Interior were limited to acenaphthene and naphthalene in one and two shallow wells located in the southern portion of the Site Interior, respectively. Naphthalene was also detected above the AGWQS in two intermediate wells in the central portion of the Site Interior. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene were detected at concentrations exceeding the AGWQS in one deep well in the eastern portion of Area 7.
- VOCs exceeding the AGWQS in the shallow zone were limited to CVOCs. Those detected above the AGWQS included 1,1-DCA, 1,2-DCA, 1,1-DCE, PCE, TCE and chloroethane. Additional CVOCs detected in the intermediate or deep zone included cis-1,2-DCE, trans-1,2-DCE, chloroform, 2-chloro-ethylvinylether, and vinyl chloride. The CVOC concentrations above the AGWQS were identified in each depth zone, but the highest values were present within the deep zone in several wells located near the Site perimeter. Acetone and 2-butanone were also detected in one deep well along the northern Site boundary. CVOCs, acetone, and 2-butanone are not associated with MGP operations.
- 2-methylphenol was detected above the AGWQS in one shallow well.
- Total PCBs were detected above the AGWQS in one deep well, located in the eastern portion of Area 7. The exceedance in this well may have been the result of entrained sediment in the sample. PCBs were ND in an earlier sample collected from this well.

- Inorganic compounds detected at concentrations exceeding AGWQS included iron, magnesium, manganese and sodium in numerous wells and within each depth zone. Other detections above the AGWQS in the shallow zone included antimony (three wells), lead (two wells), barium (one well), chromium (one well), and thallium (one well). Lead and copper were also detected above AGWQS in one deep well and thallium was detected above the AGWQS in two intermediate wells.
- PFOA was detected above the groundwater screening level and PFOS was detected above the drinking water screening level in one intermediate well in Area 9.

#### 6.2.1.4. Sub-Slab Vapor and Indoor/Ambient Air

SS vapor and IA samples were collected during one initial event in March 2018 followed by limited resampling events in March and June 2019. Buildings were chosen for screening of SV and IA based on their occupancy of a minimum of eight hours or more during the work week. During each event an ambient air sample was also collected for each building sampled. Samples were collected from a total of 14 buildings during the initial March 2018 event. In the resampling events, samples were targeted from buildings with elevated detections of compounds to confirm the previous concentrations and the associated recommended actions. A total of six buildings were sampled in the March 2019 resampling event and one was sampled in the June 2019 event. The results from the sampling events are provided in Table 17.

Constituent concentrations detected in IA were compared to NYSDOH Air Guideline Values, background IA values (NYSDOH, 2006), associated OA concentrations, and the co-located SS vapor concentrations. The IA and SV concentrations were also compared to the NYSDOH decision matrices included in the SVI Guidance document to evaluate the need for remedial action.

At the on-Site buildings, 19 constituents were detected in at least one IA sample at a concentration above NYSDOH's background IA values, including:

- 1,1-DCE
- 1,1,2-Trichloroethane
- 2-Butanone
- 2-Propanol
- Acetone
- Chloroform
- Dichlorodifluoromethane
- Ethanol
- Ethylbenzene
- Methylene Chloride
- m/p-xylene
- n-Decane
- n-Dodecane
- n-Hexane
- n-Undecane
- o-Xylene
- PCE
- Styrene
- TCE

Concentrations detected above NYSDOH's background IA values were identified in eight buildings on-Site including the Transportation Building, the Stores Building, the Gatehouse, the LNG Guard House, the Facilities Building, the Service Building, the LNG Control House, and the Meter Operations Building. Two detections above the AGVs were also noted. These included methylene chloride in the LNG Guard House in March 2018 and TCE in the Facilities Building in March 2019. In each of these cases, the concentration in SV was significantly lower, indicating that the source is not likely in the subsurface. In addition, the concentrations of each of these compounds were detected at a significantly lower concentration (below the AGV) in the subsequent sampling events.

Thirteen of these constituents were not detected in the co-located SS sample or were detected at a lower concentration in the co-located SS sample, including: ethylbenzene, o-xylene, m/p-xylene, n-dodecane, methylene chloride, 2-propanol, PCE, n-undecane, 1,1-DCE, 2-butanone, 1,1,2-trichloroethane, TCE, and styrene. Therefore, these constituents are not considered to be from a subsurface source that has migrated to IA via the vapor intrusion pathway.

Acetone and n-hexane were detected at higher concentrations in SS SV than in the co-located IA samples at one of the four locations sampled in the Transportation Building. The detections of acetone may be the result of laboratory contamination. n-Hexane was also detected at elevated concentrations in SS SV at another location in the Transportation Building along with other compounds, including acetone, ethanol, 2-butanone, several petroleum-related compounds and chlorinated compounds primarily including PCE and TCE. The IA detection of n-hexane was only slightly above the background level. As such, this compound does not currently pose a health concern via the vapor intrusion pathway but has the potential to pose a health concern should the conditions of the building's foundation change. In accordance with the NYSDOH matrices, mitigation of SS SV impacts is the recommended action for the southwestern area of the building.

Concentrations of n-decane in the Stores Building in March 2018 were higher, but similar in magnitude in the SS SV than in the co-located IA sample in one of the four sampling locations in the building. However, in the March 2019 sampling event, n-decane was detected again in the same IA sampling location but was not detected in the co-located SS SV sample. Therefore, n-decane is not considered to be from a subsurface source that has migrated to IA via the vapor intrusion pathway.

Dichlorodifluoromethane was detected at a higher concentration in SV than in IA at the Meter Operations Building at each of the four sampling locations. Only one of the IA sampling locations was above the NYSDOH background levels. Dichlorodi-fluoromethane is used as a refrigerant gas in refrigerators and air conditioners. Dichlorodi-fluoromethane is also used in aerosol sprays, in plastics, and as an aid in detecting leaks. Dichlorodifluoromethane is not known to be used at this location and was not identified in the product inventory. The detections in IA may be the result of vapor intrusion. However, the IA detection was only slightly above the background level. As such, this compound does not currently pose a health concern via the vapor intrusion pathway but has the potential to pose a health concern should the conditions of the building's foundation change.

Ethanol was detected at a slightly higher concentration in SS SV than in the co-located IA at one of the four sampling locations in the Service Building during the March 2018 sampling event. Ethanol was detected at elevated concentrations in IA and SS SV at each of the four sampling locations and was higher in IA at two of the four locations. As such, the ethanol concentrations in the Service Building are not considered to be from a subsurface source that has migrated to IA via the vapor intrusion pathway.

Chloroform was detected at a slightly higher concentration in SS SV than in the co-located IA at one of the two sampling locations in the LNG Control House during the March 2018 sampling event. Chloroform is used to create other chemicals and as a solvent. Chloroform is not known to be used at this location and was not identified in the product inventory. The detections in IA may be the result of vapor intrusion. However, the IA detection was only slightly above the background level. As such, this

compound does not currently pose a health concern via the vapor intrusion pathway but has the potential to pose a health concern should the conditions of the building's foundation change.

No ambient air samples had concentrations greater than the NYSDOH background IA concentrations.

Additional sampling was conducted in the Gatehouse Building and the Facilities Building in early 2021 in accordance with a NYSDEC-approved work plan. Based on the concentrations of TCE and methylene chloride, along with the historical results, no further action is recommended for the Gatehouse Building. Continued monitoring was the recommendation for the Facilities Building based on the 2021 results.

As stated above for the Transportation Building, mitigation is recommended for the southwest portion of the building based on the NYSDOH matrices for chlorinated compounds. A similar recommendation of mitigation was also identified for two locations in the western portion of the Stores Building, as well as for one location in the eastern portion of Building 11. Although the mitigation recommendation at these locations is driven by the SV detections and not IA concentrations, the vapor intrusion pathway cannot be eliminated.

Based on these recommendations, mitigation was evaluated for the Transportation Building, Stores Building and Building 11. Mitigation was also evaluated for the Facilities Building as a conservative safety measure. Following the evaluation, mitigation via the installation of SSDSs was conducted in the Facilities Building and Building 11. Due to several factors as discussed in Section 5.5.15, continued monitoring was selected for the Stores and Transportation Buildings in lieu of mitigation in consultation with NYSDEC and NYSDOH As such, the potential for exposure is present should the conditions of the building foundations change; therefore, the vapor intrusion pathway is potentially complete.

#### 6.2.1.5. Surface Water and Sediment in Adjacent Water Bodies (Newtown Creek and English Kill)

Impacts to surface water and sediment in the water bodies adjacent to the Site have been identified. The water bodies are designated as a CERCLA site for which remedial options are currently being evaluated. There has been no migration pathway identified for NAPL from the Site to the adjacent water bodies. The contribution of impacts to surface water or sediment from the Site would be limited to dissolved phase groundwater impacts. Groundwater impacts from the Site discharge through sediments impacted by multiple sources of chemicals and NAPL that are being addressed under CERCLA. Since the potential dissolved phase migration of chemicals from the Site is considerably less in magnitude than the NAPL impacts and other impacts identified in the sediment in Newtown Creek, which have been determined to be present from sources other than migration from the Site, the impact to surface water and sediment within the water bodies from dissolved phase groundwater emanating from the Site is considered minimal and will be evaluated and addressed, if needed, as part of the remedy for the CERCLA site.

### *6.2.2. Potential Release Mechanisms*

There are several potential release mechanisms by which the constituents detected in soil, groundwater, and SV may be transported to other media. Each mechanism is considered for identified media and

potential receptor group. It is assumed that direct contact with NAPL will pose an unacceptable risk and will not be evaluated as part of the QHHEA. Potential release mechanisms for soil include the following:

- **Fugitive dust:** Constituents detected in surface and subsurface soil could be a potential source for fugitive dust as a result of physical disturbance.
- **Volatilization:** Volatile constituents detected in surface and subsurface soil may potentially be transported by volatilizing into soil-pore space and eventually emanate into outdoor or IA.
- **Leaching:** Constituents detected in surface and subsurface soil could potentially leach to groundwater.

There are three mechanisms by which constituents in groundwater can be transported to other media. These migration pathways include the following:

- **Adsorption:** Constituents in groundwater may be sorbed onto subsurface soils.
- **Volatilization:** Volatile constituents in groundwater may potentially desorb into SV and be transported into outdoor or IA.
- **Extraction:** Constituents in groundwater may migrate to other media by extraction and use of impacted groundwater.

Migration of volatile constituents in SV can be transported to other media as summarized below:

- **Migration:** Volatile constituents in SV may migrate to IA through building foundations (i.e., vapor intrusion to IA) or volatile constituents in SV may migrate to other media through soil to OA.

### *6.2.3. Potential Human Exposure Points, Exposure Routes and Receptor Populations*

This section discusses identified potential human receptors and the potentially complete exposure pathways by which receptors may be exposed to Site-derived constituents. The following summary table provides an overview of the current and potential exposure pathways. Each pathway is discussed further below.

| Environmental Media & Exposure Route | Human Exposure Assessment |
|---|---|
| Direct contact with surface soils (and incidental ingestion) | People are not typically coming into direct contact with surface soils on the majority of the Site because contaminated surface soils are covered with pavement or buildings. In these areas of the Site, people can come into contact with surface soil if they complete ground-intrusive work. Surface soil is exposed on the western portions of the Site; however, only one exceedance of the applicable criteria was noted in this area of the Site which is largely unused. In the active areas of the western portion of the Site and in the area of the LNG tanks where surface soil is also exposed, workers can come in contact with impacted surface soil, although the impacts are limited. Impacted surface soil is present on the active ballfield on the western portion of the Site. As such, this pathway is potentially complete. |
| Direct contact with subsurface soils (and incidental ingestion) | People can come into contact with subsurface soil if they complete ground-intrusive work at the Site. |
| Ingestion of groundwater | There is no exposure to contaminated groundwater because the area is served by the public water supply. |
| Direct contact with groundwater | People can come into contact with shallow zone groundwater if they complete ground-intrusive work at the Site. |
| Inhalation of air (exposures related to SVI) | A SVI evaluation was completed for existing buildings. There are potential exposures to impacted SV in several buildings (Transportation, Stores and Building 11) should the condition of the building's foundation change. SVI should be considered in the design of any new construction planned at the Site in the future.<br><br>Inhalation of impacted surface soil if contaminants become airborne. |
| Direct contact with surface water or sediment (and incidental ingestion) | People can come in contact with impacted surface water or sediment in the adjacent water bodies; however, the surface water bodies (and associated sediment) in the area have been designated as CERCLA sites for which remedial options are being evaluated. |

#### 6.2.3.1. On-Site Receptors

Potential receptor groups and potential exposure pathways that may exist for the Site are discussed below.

The Site is used for industrial purposes and is zoned for industrial land use. Current land use at the Site is expected to continue in the future. Workers occupy the Site buildings, including full-time indoor workers and intermittent indoor maintenance workers. Other workers at the Site include Gas Operations personnel, many of whom work off-Site, as well as those who work intermittently outside for maintenance, repair or upgrades to the gas distribution equipment and facilities. Some of the maintenance, repair or upgrades to the gas distribution system requires ground-intrusive work.

*Site Indoor Workers*

Site indoor workers may be exposed to volatile constituents present in the subsurface of the footprint of the buildings through the migration of impacted vapors to the IA of the building. Volatile constituents in SS vapor and IA within the Site buildings have been detected above NYSDOH's background IA values.

Mitigation was recommended for several on-Site buildings (or portions of larger buildings); however, this is driven largely by SV not IA concentrations. Currently, there are no IA concentrations detected significantly above NYSDOH background levels that are resulting from SVI. Therefore, inhalation of volatile constituents in IA is not considered to be complete for Site indoor workers. However, due to the elevated SS concentrations of several chlorinated compounds in several buildings and some petroleum compounds in one building, the potential exists for the exposure pathway to be complete if conditions change.

Exposure to groundwater via drinking water is not a complete exposure pathway because the buildings are supplied by a municipal water source, which is derived from surface water sources upstate New York. Municipal water in the area is not derived from local groundwater.

Direct contact exposure to constituents in soil and groundwater is not considered complete for Site indoor workers because the portions of the Site not covered by building foundations in which they typically work are paved or under gravel, and because Site Indoor workers do not conduct intrusive work at the Site. As a result, they are unlikely to directly contact soil and groundwater beneath the Site.

### *Site Outdoor Industrial Workers*

Direct contact exposure to constituents in subsurface soil and groundwater is not considered complete for Site outdoor industrial workers because the Site is mostly paved, and because Site outdoor industrial workers do not conduct intrusive work at the Site and so are unlikely to directly contact soil and groundwater beneath the Site.

Direct contact exposure to constituents in exposed surface soil in the active areas of the western portion of the Site and in the area of the LNG tanks is complete for Site outdoor industrial workers. Inhalation of impacted surface soil is possible if contaminants become airborne. A large portion of the Site is covered with buildings, roads, gravel, or vegetated surfaces reducing the possibility of impacted surface soil becoming airborne. In the active areas of the western portion of the Site, a water truck is used to reduce dust generation in accordance with New York City Department of Sanitation permit for the facility known as the Fill Material Transfer Station. In the area of exposed soil near the LNG tanks vehicle traffic is minimal and access is restricted by secondary fencing and a security check point; however, if dust generation is likely, similar measures should be taken. Dust is not currently being generated in these areas of the Site. However, the pathway is potentially complete, as the potential for dust generation is present.

### *Site Construction Workers*

Constituents have been reported in subsurface soil and groundwater at concentrations in excess of IUSCOs and AGWQS. Outdoor construction workers may potentially be exposed to constituents in subsurface soils and groundwater through direct contact (dermal contact or incidental ingestion) or inhalation of particulates during intrusive construction activities.

Direct contact exposure to constituents in exposed surface soil in the active areas of the western portion of the Site and in the area of the LNG tanks is complete for Site outdoor industrial workers. Inhalation of

impacted surface soil is possible if contaminants become airborne. Since this condition is not currently present at the Site, the pathway is not complete.

Impacted groundwater is present beneath the Site at depths from approximately 5 to 55 feet bgs, making it potentially available for contact by a construction worker. Only properly trained field personnel should complete ground-intrusive work in these areas using methods specified in a Site-specific HASP, a project specific Excavation Work Plan (EWP) or in the EWP included in the Draft ISMP until the area has been cleared of impacted soils and groundwater.

### *Site Visitors and Trespassers*

The operational portions of the Site are covered almost entirely with large industrial or commercial buildings, as well as paved or gravel covered surfaces, therefore direct contact with the subsurface is unlikely for Site visitors and trespassers. These receptors are unlikely to conduct intrusive work in the area, therefore, direct contact with reported constituents in subsurface soils and groundwater is not considered to be a complete exposure pathway.

Direct contact to constituents in surface soil is possible for visitors and trespassers in select areas of the western portion of the Site and in the area of the LNG tanks; however, access to the Site is restricted by fencing and security. Additional internal fencing and security is present at the LNG perimeter. The security measures should limit trespasser exposure. Visitation of these areas does not occur frequently. The entire Site is fenced along its perimeter with the LNG facility fenced internally, separating it from the operations area. The Site operates 24 hours per day with full-time Site-wide security. Inhalation of impacted surface soil in these areas is possible if contaminants become airborne. As such, the pathway is potentially complete.

The ballfield area in Area 9 is no longer active. Direct contact to constituents in surface soil is possible for visitors or trespassers in this area; as such, the exposure pathway in this area is potentially complete.

## 6.2.3.2. Off-Site Receptors

Although not investigated as part of the RI some Site-related groundwater impacts may be present in select off-Site areas. However, due to the historically industrial nature of the area as detailed in previous sections of this report, any impacts present are likely due to a combination of sources. This is particularly applicable to the surface water bodies adjacent to the Site which have been designated as a CERCLA site. Furthermore, since the potential dissolved phase migration of chemicals from the Site is considerably less in magnitude than the NAPL impacts and other impacts identified in the sediment in Newtown Creek, which have been determined to be present from sources other than migration from the Site, the impact to surface water and sediment within the water bodies from dissolved phase groundwater emanating from the Site is considered minimal and will be evaluated and addressed, if needed, as part of the remedy for the CERCLA site. That being the case, off-Site receptors were generally not evaluated in the QHHEA except where on-Site impacts could affect off-Site receptors as discussed below.

Similar to on-Site receptors, off-Site receptors could be exposed to inhalation of impacted surface soil is possible if contaminants become airborne. Since this condition is not currently present, the pathway is not complete.

### *6.2.4. Summary of Receptors and Potentially Complete Exposure Pathways*

A summary of the environmental media, potential receptors and potentially complete exposure pathways has been provided in the following table. Potential receptors are based on Site use and adjacent site uses, and the potential for future uses and activities (i.e., construction/utility activities). Potentially complete exposure pathways are identified if a receptor has a current or potential future exposure to impacted media.

| Location | Media | Exposure Routes | Indoor Worker | Outdoor Commercial/ Industrial Worker | Construction/ Utility Worker | Visitor/Trespasser |
|---|---|---|---|---|---|---|
| Site | Surface Soil | Inhalation (volatiles and particulates) Direct Contact (incidental ingestion, dermal contact) | X | ☐ | ☐ | ☐ |
| | Surface Soil (Public Ballfield) | Inhalation (volatiles and particulates) Direct Contact (incidental ingestion, dermal contact) | X | ✓ | ✓ | ✓ |
| | Subsurface Soil | Inhalation (volatiles and particulates) Direct Contact (incidental ingestion, dermal contact) | X | X | ☐ | X |
| | Groundwater | Ingestion Direct Contact | X | X | ☐ | X |
| | Soil Vapor | Inhalation | ✓ | X | ☐ | X |
| | Indoor Air | Inhalation | X | X | X | X |
| | Ambient Air | Inhalation | X | X | X | X |

| Location | Media | Exposure Routes | Indoor Worker | Outdoor Commercial/ Industrial Worker | Construction/ Utility Worker | Visitor/Trespasser |
|---|---|---|---|---|---|---|
| Off-Site | Surface Soil | Inhalation (volatiles and particulates of airborne on-Site surface soil) | X | X | X | X |
| | Subsurface Soil | Inhalation (volatiles and particulates) Direct Contact (incidental ingestion, dermal contact) | NE | NE | NE | NE |
| | Groundwater | Ingestion Direct Contact | NE | NE | NE | NE |
| | Soil Vapor | Inhalation | NE | NE | NE | NE |

Notes:
X: Incomplete Exposure Pathway
✓: Potentially Complete Exposure Pathway
☐: Complete Exposure Pathway
NE: Not evaluated

## 6.3. Conclusions

Site construction workers who perform excavation work on-Site may potentially be exposed to contaminants in subsurface soil and groundwater if subsurface excavation work is needed at the Site. Site construction workers could also be exposed to impacted SV. Only properly trained field personnel should complete the subsurface work at the Site using methods specified in a Site-specific HASP, a project specific EWP or in the EWP included in the Draft ISMP until the work area has been cleared of impacted soils and groundwater.

Outdoor workers or visitors/trespassers in the active portion of the western Site area and the LNG tank areas may potentially be exposed impacted surface soil. Workers should avoid making direct contact with the soil in this area. In the active areas of the western portion of the Site, a water truck is used to reduce dust generation in accordance with New York City Department of Sanitation permit for the facility known as the Fill Material Transfer Station. In the area of exposed soil near the LNG tanks vehicle traffic is minimal and access is restricted by secondary fencing and a security check point; however, if dust generation is likely, similar measures should be taken to prevent the pathway from becoming complete. Access to the Site restricted by fencing and security. The entire Site is fenced along its perimeter with the LNG facility fenced internally, separating it from the operations area. The Site operates 24 hours per day with full-time Site-wide security. The security measures should limit trespasser exposure in most areas.

Visitation of these areas does not occur frequently. Inhalation of impacted surface soil in these areas is possible if contaminants become airborne. As such, the pathway is potentially complete.

The use of the ballfield area in Area 9 by the public has been discontinued. Direct contact to constituents in surface soil is possible for visitors or trespassers in this area; as such, the exposure pathway in this area is potentially complete. However, the ballfield area is fenced and locked, thereby limiting the chance for exposure. Furthermore, the exceedances of the IUSCOs are generally in the deeper intervals and the areas with exceedances in the shallow sampling interval are generally covered with grass. Future use of the ballfields for recreational activity is not planned; however; should recreational uses again be considered in the future, it is understood that this area of the site must meet the RRUSCOs.

No complete exposure pathways were identified for Site indoor workers. A potentially complete exposure pathway to impacted SV is present to Site indoor workers or visitors should the conditions of the foundation of several buildings change.

Although not investigated as part of the RI, some Site-related groundwater impacts may be present in select off-Site areas. However, due to the historically industrial nature of the area any impacts present are likely due to a combination of sources. This is particularly applicable to the surface water bodies adjacent to the Site which have been designated as a CERCLA site, for which remedial options are being evaluated.

# 7. Fish and Wildlife Resource Impact Analysis

In accordance with Section 3.10 of DER-10 (NYSDEC, 2010), a FWRIA was conducted to identify actual or potential impacts to fish and wildlife resources at and in the vicinity of the Site. If such impacts were determined to be present, the FWRIA was also designed to determine if further assessment is needed to complete an ecological impact assessment. The FWRIA thus consists of two parts: Part 1 (Resource Characterization), and, if needed, Part 2 (Ecological Impact Assessment). If the Resource Characterization finds that no resources are at risk an Ecological Impact Assessment is not needed.

## 7.1. Need for a FWRIA

Appendix 3C of DER-10 presents a portion of the FWRIA Decision Key to determine whether a FWRIA is needed at a site.

| **Appendix 3C**<br>**Fish and Wildlife Resources Impact Analysis Decision Key** | | If YES Go to: | If NO Go to: |
|---|---|---|---|
| 1. | Is the site or area of concern a discharge or spill event? | 13 | (2) |
| 2. | Is the site or area of concern a point source of contamination to the groundwater which will be prevented from discharging to surface water? Soil contamination is not widespread, or if widespread, is confined under buildings and paved areas. | 13 | (3) |
| 3. | Is the site and all adjacent property a developed area with buildings, paved surfaces and little or no vegetation? | (4) | 9 |
| 4. | Does the site contain habitat of an endangered, threatened or special concern species? | Section 3.10.1 | (5) |
| 5. | Has the contamination gone off-site? | (6) | 14 |
| 6. | Is there any discharge or erosion of contamination to surface water or the potential for discharge or erosion of contamination? | (7) | 14 |
| 7. | Are the site contaminants PCBs, pesticides or other persistent, bioaccumulable substances? | (Section 3.10.1) | 8 |

Circled values indicate the selected responses. The process points (in item #7) to the need to proceed with a Part 1 Resource Characterization per Section 3.10.1 of DER-10 because the analysis does not allow a conclusion of "No FWRIA needed" Iitem # 14 in the full Appendix 3C decision key). The Part 1 Resource Characterization is presented in Section 7.2 and provides input about the need for a Part 2 Ecological Impact Evaluation per Section 3.10.2 of DER-10. The following discussion presents some further detail on the decision key process.

1. NO. The concern at the Site is not the result of a discrete discharge or spill event.
2. NO. The Site is not a point source of contamination to groundwater and is not currently prevented from discharging to Newtown Creek.
3. YES. As discussed in Section 2.4 and shown on Figure 4, the Site and all adjacent upland property are developed land with buildings, paved areas, and little vegetation. Vegetation is mostly

limited to maintained lawns (near Facilities Building, Meter Operations Building, Stores Building, Service Building, and the little league field in the northwest corner of the Site as shown on Figure 3) or unmaintained weeds and scrub (Areas 5, 6 and 9). Surrounding properties are commercial, industrial, and limited areas of residential land use.

4. NO. The Site is a developed industrial site in a long-term industrial area of New York City. It does not provide habitat for wildlife of any kind, and no habitat for any threatened, endangered, or species of special concern. No environmental resources were identified in the vicinity of the Site using NYSDEC's Environmental Resource Mapper (see Figure 7a below).
5. YES. However, the impacts are limited to the dissolved phase. NAPL present in sediment in Newtown Creek is not due to lateral migration from the Site and is likely the result of historic spills to the creek and migration from off-Site as discussed in Section 5.2.4 and Section 8.2.2. The dissolved-phase impacts must pass through sediment impacted from off-Site sources prior to discharge. Any NAPL-related sediment impacts potentially resulting from historic MGP releases are limited to the deeper zone. The deep zone has been subsequently buried by the soft sediment, most of which has accumulated following the completion of MGP-operations at the Site and is below the ecological exposure zone.
6. YES. There is some limited potential for off-Site migration of contamination from the Site to the adjacent waters of Newtown Creek via overland erosion or stormwater discharge. However, surface soil exceedances of the IUSCOs within 750 feet of the Newtown Creek shoreline adjacent to the Site were limited to two locations (out of nine samples collected), one of which was within the bermed area of LNG Tank 1. There are no known stormwater catch basins that would capture and potentially discharge contaminants in these two areas.
7. YES. The contaminants at the Site include PCBs; however, only low-level detections of PCBs were identified in a limited amount of soil and groundwater samples at the Site and none of these detections were identified in soil or groundwater samples in the vicinity of the creek. No known migration pathways for PCB contamination to either Newtown Creek or English Kills have been identified. Based on the low levels of PCBs detected, the GPEC cannot account for the elevated detections of PCBs in sediments adjacent to the site which in some locations exceed 50 mg/kg.

Therefore, a Resource Characterization will be needed.

## 7.2. Part 1: Resource Characterization

The resource characterization includes the following five considerations:

- Identification of fish and wildlife resources
- Description of resources
- Contaminant migration pathways
- Contaminants of potential ecological concern (present in areas of identified F&W resources*)* at concentrations to be toxic, bio-accumulative or health advisory triggering
- Conclusions

### *7.2.1. Identification of Fish and Wildlife Resources*

Figure 7a presents the environmental resources at or near the Site.

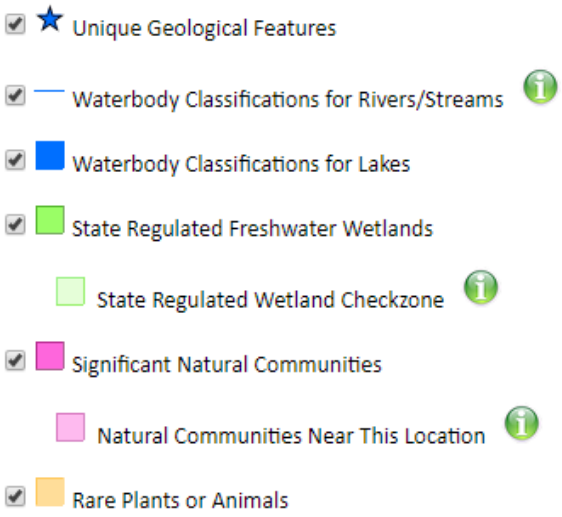
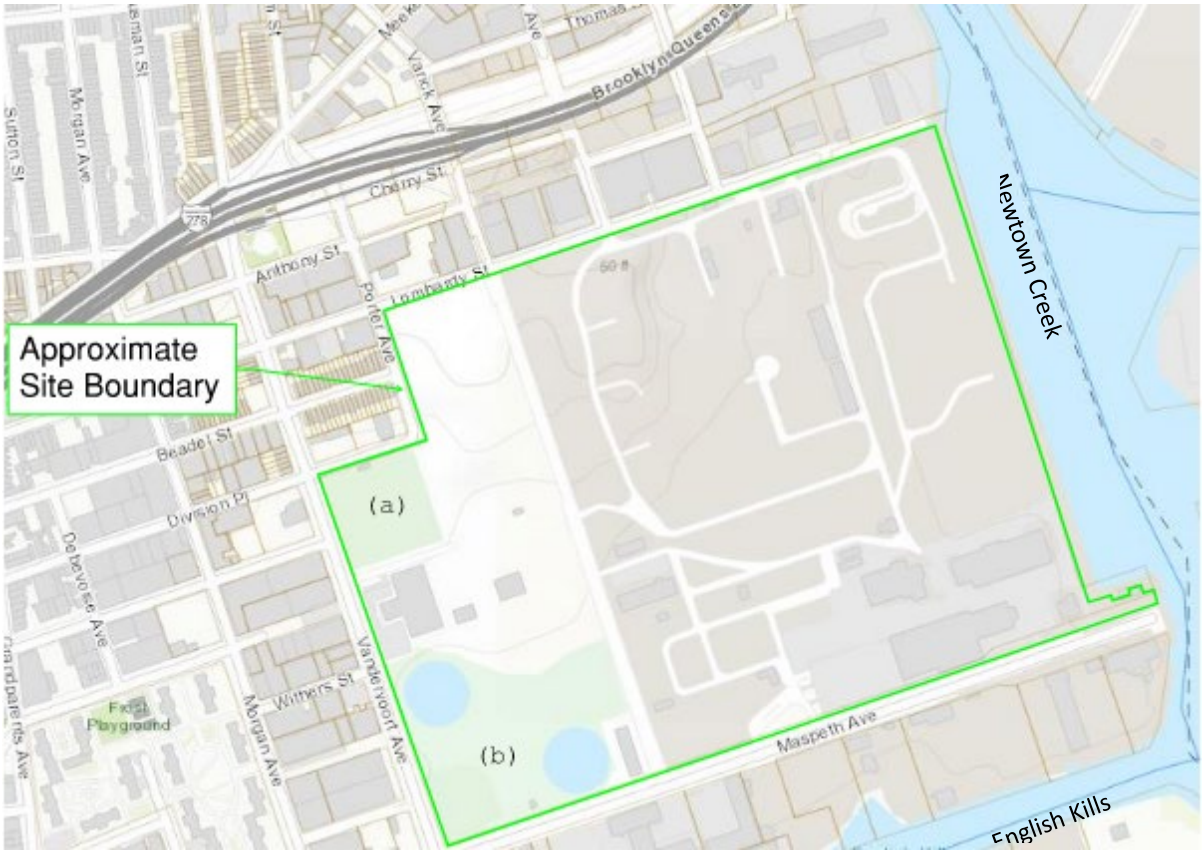



**Figure 7a. NYSDEC Environmental Resource Map**



The water bodies identified in the image (Newtown Creek and English Kills) are estuarine water bodies classified as Class SD. Class SD waters are suitable for fish, shellfish, and wildlife survival, but may not meet requirements for fish propagation due to natural or man-made conditions.

Area (a) on the map are former ball fields. Area (b) includes the former gas holder footprints (indicated in blue on figure, although these are not water bodies), with limited surrounding urban weedy and shrub coverage.

Other than Newtown Creek and its tributaries, no other fish and wildlife resources are present at or within the vicinity of the Site. Fish and wildlife resources may include lakes, rivers/ streams, freshwater wetlands, significant natural communities or rare plants or animals.

### *7.2.2. Description of Resources*

Per Section 7.2.1, the only potential fish and wildlife resource potentially affected by the Site is Newtown Creek and its tributaries. The Site boundary which abuts Newtown Creek is shown on Figure 3 and described in detail in Section 2.1. English Kills is approximately 300 feet south of the Site. Both of these waterbodies form part of the ongoing Newtown Creek CERCLA site and are being extensively studied as part of the RI/FS for that Site.

The CERCLA RI/FS process for Newtown Creek has not yet been completed, however the RI Report was finalized and approved by USEPA in 2023. The RI report included the approved Baseline Human Health Risk Assessment (BHHRA) and Baseline Ecological Risk Assessment (BERA), which were previously completed in 2017 and 2018, respectively (Anchor QEA 2017 and 2018). These documents describe the resources, exposure pathways, contaminants of potential concern and risk characterization for sediment and surface water in Newtown Creek including the portions of Newtown Creek immediately adjacent to the Site.

The surface and subsurface sediment data collected as part of the GPEC PDI at locations in Newtown Creek outboard of the Loading Platform/dock structure as described in Section 3.7 has been fully incorporated and evaluated within the Newtown Creek CERCLA process.

The Newtown Creek BHHRA and BERA concluded that risk cannot be excluded for sediment-associated biota, fish, and fish consumption due to elevated sediment and water concentrations of multiple contaminants of potential concern including PAHs, PCBs, and copper. The sources for these contaminants remain under investigation and include multiple PRPs. Therefore, this FWRIA will not further evaluate the description of resource, conditions and issues related to the Newtown Creek CERCLA site.

### *7.2.3. Contaminant Migration Pathways*

The contribution, if any, from the Site to Newtown Creek is currently being investigated as part of the Newtown Creek CERCLA process. As discussed in Section 3.4, the NYSDEC agreed that following the PDI and Supplemental PDI work that a containment barrier between GPEC and Newtown Creek was not required at that time because the investigation demonstrated that there were no subsurface NAPL migration pathways from the Site to Newtown Creek sediment. In addition, as discussed in Section 3.13.1, following the Loading Platform Area Investigation, NYSDEC agreed in a letter dated

June 26, 2018, that mobile NAPL does not appear to be present in the Loading Platform area adjacent to Newtown Creek. All sediment data collected as part of the PDI for the Site have been included in the CERCLA process.

#### 7.2.3.1. Lateral and Vertical NAPL Migration

Saturated NAPL impacts have been visually observed in sediment in Newtown Creek and underlying native material in sediment cores off the Loading Platform. These sediments have accumulated since the since the area was last dredged to EL -28 feet above msl in 1949, immediately prior to the operation of the former MGP. The source of any impacts in the approximately 16 feet of sediment that has accumulated, both outboard and beneath the Loading Platform since this time is not attributed to subsurface migration from the Site, but rather from historic releases to the Creek surface that migrated vertically to the sediment bed or by migration from off-Site sources.

As further discussed in Section 8.2.2, potentially mobile NAPL has not been visually observed on the landside at an elevation that could migrate laterally and affect the sediments or water column of Newtown Creek. The NYSDEC has agreed with these findings as discussed in Sections 3.4 and 3.13.1. Therefore, the lateral migration pathway of NAPL from the Site is incomplete.

The contamination present in the native material below the sediments poses no potential risk to fish and wildlife resources in Newtown Creek. There is no mechanism for deeply buried DNAPL or associated contaminants within the native sands beneath the accumulated sediment to migrate upwards through the accumulated sediment to reach the biologically relevant exposure zone in the top half foot of sediment. Therefore, the vertical migration pathway potentially associated with DNAPL historic spills to Newtown Creek biological zone is incomplete.

#### 7.2.3.2. Groundwater

Groundwater contours presented in Section 4.2 show that groundwater in the Upper Glacial Aquifer flows toward Newtown Creek primarily in the southeast corner of the Site but throughout the Loading Platform Area (Figures 20 through 28). This corresponds to the northern end of English Kills and the upper end of Newtown Creek. Groundwater may be a migration pathway for any dissolved contaminants contained in the aquifer.

Groundwater analytical results in the area of potential emergence in the shallow and intermediate intervals are summarized in Section 5.2.3. The results indicate that shallow and intermediate groundwater contain low levels of BTEX and PAHs above the AGWQS. PCBs were not detected in any of the samples collected in the shallow or intermediate zone and were not detected in any zone during the recent 2024/2025 additional groundwater sampling event. The highest concentrations of BTEX and PAHs were identified in the primary emergence zone in the southeast corner of the Site. It is noted that these impacts appear to be attenuating based on a comparison of the data from the PDI and RI groundwater events to the recent 2024/2025 additional groundwater sampling event.

This pathway of dissolved phase impacts to Newtown Creek is therefore potentially complete locally in the southeast corner of the Site for BTEX and light (more soluble) PAHs. However, the expected contaminant flux is low as the plume is narrow and concentrations are relatively low. PAHs and BTEX are

not reported in the Newtown Creek CERCLA process as a contaminant of concern for surface water (Anchor QEA 2017 and 2018). Therefore, the groundwater pathway is complete but insignificant in relation to Newtown Creek resources.

The ongoing Newtown Creek CERCLA process is considering groundwater contribution to the conditions identified in the RI/FS for Newtown Creek and is further addressed within the context of that process.

#### 7.2.3.3. Stormwater

Stormwater and runoff are a potential source of migration to Newtown Creek. Section 5.2.5 notes that no preferential pathways or environmental conditions related to former operations at the Site were identified. While there is a limited potential for overland erosion and stormwater discharge to the adjacent waters of Newtown Creek [as noted in Section 7.1 (#6)], the vast majority of the Site surface in the vicinity of Newtown Creek is either covered with asphalt, concrete, or stone or located behind containment berms for the LNG tank. In addition, there is a raised lip along the top of the entire bulkhead approximately 1 foot in height that would restrict any significant amounts of soil from the Site that may be suspended in flood waters from entering the adjoining Newtown Creek via overland flow. There are a limited number of scuppers built into the raised lip (see photos below), but as noted above, the vast majority of the Site surface in this area is covered with either asphalt, concrete, or stone. Additionally, no erosion has been noted in the areas around the scuppers. This pathway is therefore considered incomplete.

**Photo 1. Raised lip along bulkhead**



**Photo 2. Scupper along raised lip**



### *7.2.4. Contaminants of Potential Ecological Concern*

As shown on Figure 7a, contaminants of potential ecological concern are those that have been identified at the Site which at location (a) have been determined to exist in identified fish and wildlife resource areas, at concentrations that may bioaccumulate, result in toxic effects, or contribute to health advisories at location (b). As discussed in Section 7.2.3 all the pathways to Newtown Creek are either

incomplete (deep buried contamination) or complete but insignificant (localized migration of groundwater with light PAHs and BTEX) to Newtown Creek in the southeast corner of the Site.

Table 21 presented results for the sediment collected in Newtown Creek as part of the PDI. As noted previously, the sediment impacts represent a combination of historical releases and migration from other sources. The vertical migration pathway from the deeply buried contaminants potentially associated with historical spills related to the Site is incomplete, and therefore these contaminants do not point to adverse effects.

The ongoing Newtown Creek CERCLA RI/FS is considering these sediment results as part of the overall Newtown Creek remedy.

## 7.3. Conclusions

The FWRIA Part 1 Resource Evaluation indicates that fisheries and wildlife resources do not constitute an important component of the environment at the Site. Newtown Creek is a potential resource near the Site. However, identified migration pathways that may result in actual or potential continuing impacts to Newtown Creek resources appear to be of minor extent. However, Newtown Creek impacts, including any potential Site-related migration pathways and exposures, is being addressed as part of the ongoing CERCLA process and further evaluation is best considered in that context.

The Part 1 FWRIA presented here suggests a Part 2 FWRIA ecological impact evaluation for the Site or additional evaluation in Newtown Creek is not warranted.

# 8. Conceptual Site Model

## 8.1. Introduction

The CSM provides a framework for understanding contaminant distribution at the Site based on the data collected. This CSM discusses the nature, extent and potential migration of NAPL visually observed along the perimeter of the Site closest to Newtown Creek and English Kills, as well as potential sources and migration pathways for contaminants in soil, groundwater and SV. The potential for ecological or human receptor exposure is also evaluated. The CSM will serve as a basis for decisions regarding subsequent investigations and remedial strategy.

## 8.2. NAPL

### *8.2.1. Transport and Migration Mechanics*

This section provides background information regarding the physical processes involved in NAPL migration. The information and concepts presented here serve as a baseline to understand and interpret NAPL migration, fate, and transport at the Site. Site-specific discussion of the CSM follows this section.

NAPL fate and transport is dependent on various characteristics of the NAPL and of the media in which the NAPL is present. For a NAPL to be potentially mobile in a porous media, the NAPL must be present in a fully saturated state. Fully saturated conditions consist of accumulations where the entirety of the pore space of the media appears to be filled with a NAPL creating continuous liquid phase in the pore spaces of the media (Guswa, 2003). The saturated conditions result in a NAPL head pressure within the saturated media and serve as the driving force on the NAPL. The relative mobility of this NAPL in the saturated zone is dependent on the density and the viscosity of the NAPL. NAPLs with a density less than water (LNAPLs) will tend to float on the surface of the water table while NAPLs with a density greater than water (DNAPLs) will penetrate into the water table. The viscosity of the NAPL, or the measure of a NAPL's resistance to flow, has a similar effect on the relative mobility. A NAPL with a high viscosity will be resistant to flow while a NAPL with a low viscosity will flow more readily.

Once in contact with groundwater in a porous media, the interfacial tensions and wettability of the DNAPL along with the DNAPL head pressure dictate further vertical migration. In most natural systems, water is the wetting fluid and the DNAPL is the non-wetting fluid. The wetting fluid will tend to coat the surface of the grains and occupy the smaller pore spaces, where the non-wetting fluid will tend to be restricted to the largest openings. Therefore, a DNAPL with a low interfacial tension with water would typically be the non-wetting fluid and would be restricted to the larger pore spaces in the media.

The characteristics of the media (capillary force/pressures, pore size distribution, moisture content, and stratigraphic changes) in conjunction with the DNAPL characteristics described above, determine whether and how DNAPL will move in a porous media.

Before a non-wetting fluid such as DNAPL can enter a porous media, the entry pressure of the DNAPL must exceed the capillary pressures of the largest pores. The entry pressure is achieved when a sufficient

volume of DNAPL, typically at full saturation, creates a DNAPL pressure head (driving force), which exceeds the entry pressure. Even when the entry pressure is achieved, the DNAPL migration is still typically restricted to the larger pore spaces and does not displace the water from the smaller pore spaces typical of fine-grained materials like silt and clay.

As a finite volume of a DNAPL migrates through a porous media, the volume of DNAPL becomes spread until the DNAPL is no longer in a saturated state. When NAPL is not present in a saturated state, it is said to be in a residual state typically consisting of discrete blebs. Material in a residual state no longer has sufficient volume of DNAPL to create the DNAPL pressure head needed to overcome the entry pressure of the porous media (Guswa, 2003) and the DNAPL migration front thus stagnates.

At sites adjacent to tidally influenced water bodies, the influence of tidal cycle fluctuations of groundwater elevation on NAPL mobility should be considered if the NAPL is an LNAPL (e.g. lighter than water). LNAPL, if present on the water table can be mobilized by tidal effects and create a smear zone at the groundwater interface. However, LNAPL was not encountered at the Site. Tidal fluctuation does not affect mobility of DNAPL because it does not reside on the water table. Therefore, tidal fluctuations do not have an impact on mobility of NAPL at the Site.

### *8.2.2. NAPL Occurrence*

#### 8.2.2.1. Loading Platform Areas 1 & 2

Residual NAPL impacts (coatings, blebs or sheens) were visually observed in soils along the entire Loading Platform Area; however, potentially saturated DNAPL was only visually observed in isolated areas as described below. LNAPL has not been visually observed in the Loading Platform Area.

Residual NAPL impacts including odors, sheen, staining, and blebs were visually observed in several borings mostly within shallow and intermediate soils in Areas 1 and 2. Isolated residual impacts were visually observed in deep soils along the Loading Platform. With the exception of the two boring/well locations (GPEC-MW409/RW409 and GPEC-SB05C), potentially DNAPL-saturated soils were only visually observed in the sandy intermediate and deep glacial outwash deposits below the marsh deposits and above the Gardiner's Clay in Area 1 and the southern portion of Area 2 at elevations substantially below the native sand and accumulated sediment interface in Newtown Creek. This illustrates that the NAPL within the Newtown Creek sediment did not originate from lateral migration from the Site because there is no migration pathway present. This was further confirmed through the supplemental Loading Platform Area investigation discussed in Section 3.13.1.

The potentially DNAPL-saturated soil in the GPEC-MW409/RW409 area was visually observed at the base of the fill layer in a small pocket that is confined by a layer of silt. The potential DNAPL saturation identified in boring GPEC-SB05C was approximately 1-foot thick and was located within a low permeability zone in the shallow portion of the intermediate zone. DNAPL has not accumulated in either the recovery well installed at the GPEC-RW409 location or in monitoring well (GPEC-MW05S) screened across the saturated interval immediately adjacent to GPEC-SB05C. This DNAPL at these two locations does not appear to be mobile based on a lack of accumulation in the recovery or monitoring wells screened across the potentially saturated zones, a lack of potentially DNAPL-saturated soil in

surrounding delineation borings (discussed below), and saturated NAPL has not been visually observed in the sediment or underlying native material in Newtown Creek adjoining these areas. The presence of a potentially saturated condition does not necessarily mean that the NAPL in the area will be mobile. A sufficient volume of NAPL is required to create a NAPL pressure head (driving force) which must exceed the entry pressure of a porous media to become mobile as discussed in Section 8.2.1. Residual NAPL conditions do not have a sufficient head pressure to mobilize.

Except for borings GPEC-SB205 and GPEC-SB207, which are immediately adjacent to the Loading Platform, zones of potential NAPL-saturation have been laterally constrained by surrounding borings that are free of DNAPL-saturated soils. Mobile DNAPL is being actively recovered from the GPEC-SB205 area in monitoring well GPEC-MW205, as well as in wells GPEC-MW01R and GPEC-MW-3D. The DNAPL in GPEC-SB207 was limited to a narrow lens of approximately 6-inches in thickness. The source of NAPL impacts along the Loading Platform in Areas 1 and 2 is not immediately clear based on the mapped locations of historical Site operations structures (Plate 1). The vertical extent of NAPL in Areas 1 and 2 appears to be constrained and influenced by the presence of discontinuous lenses of lower-permeability deposits in the intermediate soil zone and the Gardiner's Clay regional confining unit. In addition, it is likely that vertical migration is limited in some locations by insufficient source volume to maintain a DNAPL pressure head to drive the material down to the Gardiner's Clay.

#### 8.2.2.2. Sediment

Potentially saturated NAPL impacts were visually observed in the sediment in Newtown Creek and underlying native material in sediment cores that were advanced off the Loading Platform. The shallow sediments beneath the Loading Platform are similarly impacted to those outboard of the Loading Platform because there is no separation between the two and the inboard area is limited in width. As stated in Section 2.2, the sediments have accumulated since the Creek was last dredged in 1949, immediately prior to the operation of the former MGP. Creek sediments and marsh deposits were dredged to El. -28 feet above msl prior to placing fill and constructing the Loading Platform. Any potential sources of contamination, resulting from operations prior to the start of the MGP, above the historic dredge elevation would have been removed with the dredged material. The source of NAPL impacts in Newtown Creek sediments, which have accumulated since the Creek was dredged, likely is attributed to historic releases to the Creek surface or by migration from off-Site sources.

The potential NAPL saturation identified on the landside along the Loading Platform Area, with the exception of the potentially saturated NAPL in the GPEC-MW409/RW409 and GPEC-SB05C areas (discussed above) that does not appear to be mobile due to a lack of NAPL accumulation in recovery or monitoring wells screened across the potentially saturated zones and a lack of potentially DNAPL-saturated soil in surrounding delineation borings, was found at depths substantively deeper than the NAPL visually observed near the native sand and accumulated sediment interface in Newtown Creek. This illustrates that the NAPL within the Newtown Creek sediment did not originate from lateral migration from the Site because there is no pathway present for migration. In addition, historic maps and records suggest that historical Site operations related to LP storage and handling occurred at least 500 feet back from of the Loading Platform shoreline that was completed between 1927 and 1929 as discussed in Section 2.2.

DNAPL identified in the shallow native material below Newtown Creek sediments primarily begins at the depth of the historic dredge line (El. -28 feet above msl) indicating that the source of DNAPL impacts in this zone is also likely attributed to historic spills to the Creek and not lateral migration from the Site. Any DNAPL that was likely spilled in the period immediately following the dredging would have reached the historic creek bottom and migrated downward. The migration would have followed a typical pattern, moving vertically within more permeable material and laterally along the surface of any lower permeability units. The downward migration would continue until the pressure head, which is a function of the volume of DNAPL present, is balanced out by the capillary pressure. This movement may explain the intermittent layers of impacts identified within the creek deep native material.

### *8.2.3. Maspeth Alignment (Areas 4 and 5)*

Potentially DNAPL saturated soil in the Maspeth Alignment area was primarily identified in the shallow zone in the vicinity of Holder 1. A limited area of deeper impacts was identified to the west of the Holder 1 area. Recovery wells were installed in the shallow NAPL saturated areas identified. No measurable NAPL is currently present in any monitoring or recovery wells installed on the Maspeth Alignment. Although saturated soil was identified in the area it is likely that the volume of NAPL (and the resultant head pressure of the NAPL) is not sufficient to overcome the entry pressure of the porous media required for the NAPL to become mobile.

NAPL-related impacts in these areas were investigated further to the south of the Site during the Equity RI. No shallow potentially DNAPL-saturated areas were identified within the Equity RI study area and the results of the Equity RI determined that NAPL did not reach English Kills from the Equity site. The NAPL saturation identified in the deeper zones to the west of the Holder 1 area are attributed to migration from the Equity site. This migration is due to the orientation of the lower permeability confining units in the area which dip generally northward from Equity towards the Site in this area.

The lower permeability confining units above which the NAPL saturation was identified dip generally northward from the Equity site towards the GPEC Site in this area and appear to be the source.

### *8.2.4. Site Interior Areas 3, 6, 7, 8, and 9*

Residual NAPL impacts (coatings, blebs or sheens and solidified NAPL) were visually observed in several borings generally located in the central portion of Area 7 and the southern and central portion of Area 8 of the Site Interior. These impacts were primarily located within the shallow zone, although some were present in the intermediate zone. No residual NAPL impacts were identified in the deep zone in the Site Interior and no areas of saturated DNAPL were identified throughout the Area.

Saturated petroleum-related LNAPL was visually observed in the shallow soil of one test pit in Area 8; however, the extent appears to be limited as it was not visually observed in an adjoining delineation boring or any other borings or test pits in the area.

## 8.3. Soils

Soil impacts at the Site were largely limited to PAHs and were generally found associated with areas of residual NAPL impacts noted above. These residual NAPL (physical) impacts and the associated chemical impacts (elevated PAHs) in soil are likely the result of the former MGP structures located in the vicinity of these areas. Exceptions include the Loading Platform Area, and the area of the Transportation Building on the southern portion of the Site along Maspeth Avenue. No known sources are present near the Loading Platform Area, as the nearest historic MGP infrastructure was located approximately 500 feet inland. Impacts in the vicinity of the Transportation Building are petroleum-related and may be the result of an off-Site source or sources but may be comingled with Site-related impacts.

Detections of metals in soil were mostly limited to the shallow zone and may be related to urban fill, with the exception of arsenic which may also be related to former coal heating operations. Detections in the intermediate or deep zones were limited to sporadic and relatively low detections of arsenic. Detections of metals in the intermediate and deep zones are unlikely to be related to historical Site operations.

Detections of cyanide were few and relatively low in concentration. The cyanide detections were generally limited to the Site Interior and were confined to the shallow soil zone. Two of these detections in one area in the vicinity of the former purifiers were found along with bluish green stained soil indicative of purifier waste.

Regarding PCB impacts at the Site, no detections above the IUSCO of 25 mg/Kg in soil were observed, which is the applicable standard for the Site. Detections above the more stringent UUSCO of 0.1 mg/Kg and groundwater standards (AGWQS) at the Site were limited. In the Loading Platform Area adjacent to Newtown Creek, only one of the 100 subsurface soil samples collected exceeded the UUSCO for total PCBs of 0.1 mg/Kg. The concentration of total PCBs in this sample was significantly below the IUSCO of 25 mg/Kg. None of the three surface soil samples collected in this area exceeded the UUSCOs (0.1 mg/Kg) for total PCBs. Along the Maspeth Alignment, seven subsurface soil samples (out of 223 samples collected in the area) were above the UUSCO (0.1 mg/Kg) for total PCBs, all of which were significantly below the IUSCO (25 mg/Kg). One surface soil sample out of four samples collected in the area was above the UUSCO (0.1 mg/Kg) for total PCBs. This sample was significantly below the IUSCO (25 mg/Kg). In the Site Interior, only 13 subsurface soil samples (out of 280 samples collected in the area) and six surface soil samples (out of 27 collected in the area) were above the UUSCO (0.1 mg/Kg) for total PCBs, all of which were significantly below the IUSCO (25 mg/Kg).

## 8.4. Dissolved Phase Contamination

Groundwater flow beneath the Site in the shallow Upper Glacial Aquifer is affected by the presence of the marsh deposits on the southern and eastern portion of the Site. Groundwater generally flows north off the meadow mat layer towards the central portion of the Site; however, in the southeastern portion of the Site some localized influence to the southeast is observed in a small area where the marsh deposits are not continuous. Tidal influence is noted in areas adjacent to the Loading Platform. In the interior portions of the Site, the groundwater contours are relatively flat. Groundwater divides, where flow splits between the three principle off-Site flow directions, are present in this area of the Site.

Shallow groundwater flowing off-property flows northward in the northern portion of the Site, easterly toward Newtown Creek (discharging through or beneath the pervious Loading Platform support), and southerly toward English Kills. Some shallow groundwater is captured by the utilities beneath Maspeth Avenue to the south of the Site. Groundwater flow in the intermediate Upper Glacial Aquifer is relatively flat across the Site with flow to the south and southeast in the southeast corner of the Site. Tidal influence is also noted in areas adjacent to the Loading Platform. Minor mounding of the groundwater table along the Loading Platform is noted in some areas. Groundwater flow in the deep Upper Glacial Aquifer is generally flat across the Site with flow generally to the east toward Newtown Creek.

Dissolved phase groundwater detections at the Site are the result of impacts from dissolving or leaching (in the unsaturated zone) from NAPL, residual NAPL, impacted soil, or from off-Site sources of impacted groundwater flowing onto the Site.

The highest levels of dissolved BTEX and PAHs were noted in the shallow groundwater zone along the southern property boundary in Area 4. Based on the petroleum impacts noted in the shallow zone in the borings in this area, LNAPL historically identified in wells in the area, and the direction of groundwater flow generally towards the Site from across Maspeth Avenue; it is possible that these impacts are from an off-Site source or sources but may be comingled with Site-related impacts. Based on the location and similarity of soil impacts, the source of these groundwater impacts may be BCF. Additional petroleum sites that could be sources adjacent to Maspeth Avenue include the Gulf Oil Refining Company/Ditmas Terminal Site or other facilities formerly located in the area. BTEX and PAH impacts in the remaining portions of the Site are likely Site-related. Elevated (>100 µg/L) detections of PAHs in the shallow groundwater were also identified in the southern Loading Platform Area and in two small areas in the southern portion of the Site Interior. These detections were from areas where residual NAPL impacts were identified. It is noted that shallow groundwater impacts in these areas, particularly BTEX, have generally significantly decreased in concentrations when comparing the RI/PDI data to the new groundwater data collected in 2024/2025.

Elevated (>100 µg/L) detections of BTEX in the intermediate groundwater were identified in two areas along the southern property boundary, one of which is in the same area where elevated BTEX concentrations were identified in the shallow groundwater, and in a small area in the southern portion of the Loading Platform Area. Elevated PAH concentrations in the intermediate groundwater were identified in one area along the southern property boundary and in two small areas in the southern portion of the Loading Platform Area. The elevated detections in the Loading Platform Area were identified in areas where NAPL-related impacts were noted. Similar to the shallow zone, intermediate impacts have also generally significantly decreased in concentrations when comparing the RI/PDI data to the new groundwater data collected in 2024/2025. Based on the 2024/2025 groundwater data, elevated BTEX and PAH concentrations were limited to one area along the southern property boundary.

Elevated (>100 µg/L) detections of BTEX in the deep groundwater were identified in the southern portion of the Loading Platform Area and in the southwest corner of the Site. Physical impacts were not identified in the screen zones of the wells in the southwest corner of the Site. The Aetna Varnish company was previously located in this area and may have contributed to groundwater impacts. Elevated detections of PAHs in the deep groundwater were identified in the southern portion and a small

area in the northern portion of the Loading Platform Area during the PDI/RI. The elevated detections in the Loading Platform Area were identified in areas where NAPL-related impacts were noted. Elevated concentrations of in these areas were limited to BTEX in the southwest corner of the Site during the 2024/2025 additional groundwater sampling event.

Based on the groundwater flow at the Site and the elevated (>100 µg/L) detections of BTEX and PAHs identified in the Loading Platform Area, there is the potential for these dissolved-phase contaminants to enter Newtown Creek, however, these contaminants must pass through NAPL-impacted sediment prior to discharge. As previously discussed, the impacts in sediment in this area are likely from multiple off-Site sources, as no migration pathway from the Site has been identified. Therefore, any contaminant loading from the groundwater interface is influenced by the NAPL-impacted sediments and is not exclusively from groundwater from the Site.

Elevated (>100 µg/L) detections of CVOCs were identified in the shallow, intermediate, and deep groundwater, with most detections located along the northern and western property boundaries. CVOCs are not related to former Site operations, they are attributed to an off-Site source or sources. A PCE and TCE plume has previously been documented in these off- Site areas. In addition, several PRPs whose uses have included CVOCs have been identified in the area. Similar to the BTEX and PAH results, the concentrations of CVOCs are generally lower when comparing the RI/PDI data to the new groundwater data collected in 2024/2025, but elevated impacts remain present in previously identified impacted areas.

PCB detections above the AGWQS of 0.09 µg/L in groundwater were limited to three wells, one of which was ND when it was resampled. The two other detections above the AGWQS were likely the result of entrained sediment within the sample and are not part of the dissolve phase groundwater fraction. Based on the limited detections of total PCBs in groundwater above the AGWQS and in soil above the UUSCO of 0.1 mg/Kg (discussed above) in the Loading Platform Area and along the Maspeth Alignment, as well as in the Site Interior, there are no known migration pathways (subsurface, overland or storm sewer) for PCB contamination to enter Newtown Creek or English Kills.

PFAS was not analyzed in groundwater samples during the PDI/RI phases. A limited PFAS investigation was conducted during the 2018 Emerging Contaminants Investigation at three wells onsite. Data from the 2018 investigation showed higher concentrations in the upgradient well and concluded that PFAS is not associated with former MGP operations. Similarly, the highest concentrations in the 2024/2025 additional groundwater investigation were identified along the upgradient Site boundaries in each depth zone further demonstrating that PFAS impacts are likely the result of an off-Site source or sources, such as the Goodman Bros Steel Drum site where significant total PFAS impacts have been observed in groundwater. It is noted that PFAS manufacturing generally began in the 1940s, near the conclusion of most of the MGP operations on the Site.

## 8.5. Soil Vapor

The potential for exposure to VOCs in buildings at the Site through vapor intrusion is relatively low, as the areas of significant VOC impacts in shallow soil or groundwater generally do not correspond to the location of occupied buildings on-Site. The exception includes the Transportation Building on the

southern perimeter of the Site. Elevated levels of VOCs have been detected in groundwater in this area. The source of the VOCs may be from an off-Site source or sources in the area.

Chlorinated VOCs, which are not believed to be Site-related, have been identified in groundwater throughout the Site and have been detected in SV in several buildings. Elevated detections in groundwater (>100 µg/L) have primarily been in intermediate or deep zones. Based on the SV detections, and SSDSs was installed in one building and a second SSDS was installed in another building as a conservative safety measure. Ongoing monitoring was selected for the Transportation Building and another building in lieu of SSDS installations due primarily to building construction and other factors. The SSDS installation and ongoing monitoring plan was agreed upon in consultation with NYSDEC and NYSDOH.

## 8.6. Ecological and Human Receptors

There is minimal to no risk for ecological receptor impacts at the Site given the lack of habitat, the industrial nature of the RI Study Area, and the transient nature of wildlife in urban areas. However, Newtown Creek is a potential resource near the Site. Migration pathways from the Site that may result in actual or potential continuing impacts to Newtown Creek resources appear absent or insignificant in comparison to the impacts present in the creek from numerous sources. Newtown Creek impacts are being addressed, as needed, as part of the ongoing CERCLA process and further evaluation is best considered in that context.

As discussed in Section 6, there are potentially complete pathways for human receptors to come into contact with chemical compounds at the Site. Outdoor workers, visitors/ trespassers or potential future construction workers could be exposed to contaminants in surface soil. Potential future construction workers who perform excavation work on the Site may also potentially be exposed to contaminants in surface soil, subsurface soil, SV and groundwater if subsurface excavation work is needed at the Site.

# 9. Summary and Conclusions

## 9.1. Summary

The RI activities were performed under the terms of NYSDEC AOC No. A2-0552-0606 to assess environmental conditions related to former gas manufacturing processes at the Site. This section of the report provides a summary of the findings of the investigations.

The RI was designed and implemented to assess potential subsurface environmental impacts resulting from the historical Site operations, which include the former MGP. The scope of work was developed after reviewing historical plans and other available records so that the RI focused on addressing areas most likely to have had releases from the historical Site operations.

The RI was conducted in a phased approach based on geography and the proximity to adjacent or nearby water bodies. Phases 1 and 2 were located on the eastern and southern boundaries of the Site, respectively, and Phase 3 was located on the remainder of the Site. This RI report addresses the findings from the RI, the PDI and supplemental PDI investigations conducted to evaluate the potential need for an IRM for NAPL containment along the Newtown Creek Loading Platform. Supplemental investigations results including the Groundwater Model Investigation, the Loading Platform Area Investigation conducted to determine whether NAPL observed by New York City on the water surface of Newtown Creek was related to migration of NAPL from the GPEC upland Site, the Emerging Contaminant Groundwater Investigation, additional SVI and surface soil investigations, various capital improvement projects, and an additional Sitewide groundwater sampling event conducted in late 2024 and early 2025, were also addressed in this RI report.

To characterize the nature and extent of impacts at the Site, the following activities were conducted during the PDI, RI, and supplemental investigations:  advanced 245 soil borings, excavated 133 test pits, installed 94 monitoring wells, three recovery wells, and 33 piezometers, aquifer testing; as well as collected 84 surface soil samples, 603 subsurface soil samples, 238 groundwater samples, and 103 SVI investigation samples (39 SV samples, 41 IA samples, and 23 OA samples. In addition, geotechnical testing and sediment sampling within Newtown Creek were conducted during the PDI to evaluate the potential need for NAPL containment along the Newtown Creek Loading Platform. The findings of the PDI, RI, and supplemental investigations are representative of the historic Site conditions since remedial activities conducted on-Site have been limited and include the IRM conducted in the northeast corner of the Site prior to the construction of the LNG liquefaction facility and the removal of soil for the construction of the Maspeth Regulator Station in the center of the Site.

Given the industrial history of the Site and the surrounding area, areas of significant impacts (i.e. areas of potential NAPL saturation) identified during the RI were limited. In general, the significant impacts were limited to two areas along the Site perimeter, in the southern portion of the Loading Platform area and in the vicinity of Holder 1 along Maspeth Avenue, with no significant impacts present in the Site interior.

### *9.1.1. Site Geology*

The field investigation revealed that the subsurface materials vary significantly at the Site. In general, the subsurface materials consist of urban fill material underlain by marsh deposits and glacial outwash. In the area of the Loading Platform, a portion of which was dredged and filled, the glacial outwash generally consists of sand and gravel, while in the southwestern area of the Site along Maspeth Avenue, lower permeability units consisting of clays, silts and sandy/silty clays are more frequently encountered and act as localized confining layers restricting vertical migration. The marsh deposits also consist of a discontinuous layer of fibrous peatrich deposits known as meadow mat, which is more prevalent in the area along Maspeth Avenue. Weathered bedrock was encountered once during the investigations, at a depth of approximately 190 feet bgs in the northeastern portion of the Site. A historical investigation indicates the depth of bedrock at about 132 to 185 feet bgs in the northern part of the Site.

### *9.1.2. Site Hydrogeology*

Groundwater flow in the shallow zone is affected by the presence of the marsh deposits on the southern and eastern portion of the Site. The marsh deposits restrict vertical flow and generally direct flow towards the central portion of the Site; however, in the southeastern portion of the Site some localized influence to the southeast is observed in a small area where the marsh deposits are not continuous. Shallow groundwater flowing off-property flows northward in the northern portion of the Site, easterly toward Newtown Creek (discharging through or beneath the pervious Loading Platform support), and southerly toward English Kills. Some shallow groundwater is captured by the utilities beneath Maspeth Avenue to the south of the Site. In the interior portions of the Site, the shallow groundwater contours are relatively flat. Groundwater divides, where flow splits between the three principle off-Site flow directions, are present in this area of the Site. Tidal influence is noted in areas adjacent to the Loading Platform. Some influence is also evident near the former stream channels on the southern portion of the Site and the utilities along Maspeth Avenue.

Groundwater flow in the intermediate Upper Glacial Aquifer is relatively flat across the Site with flow to the south and southeast in the southeast corner of the Site. Tidal influence is also noted in areas adjacent to the Loading Platform. Minor mounding of the groundwater table along the Newtown Creek Loading Platform is noted in some areas of the Site.

Groundwater flow in the deep Upper Glacial Aquifer is generally flat across the Site with flow generally to the east toward Newtown Creek.

### *9.1.3. NAPL*

Areas of potential NAPL saturation were identified in the southern portion of the Loading Platform Area and in the vicinity of Holder 1 along Maspeth Avenue. NAPL in the Loading Platform Area has mostly been identified within the intermediate and deep zones (significantly below the elevation of sediments in Newtown Creek), with the exception of NAPL identified in the GPEC-MW409/RW409 and GPEC-SB05C areas. The NAPL in these areas was present in the upper portion of the intermediate zone but does not appear to be mobile based on the lack of NAPL accumulation in recovery or monitoring wells screened across the potentially saturated zones or additional delineation borings advanced in the area

(GPEC-MW409/RW409). Based on these findings, there is no identified pathway for landside NAPL migration to the sediments, which include both beneath and outboard of the Loading Platform, or surface water in Newtown Creek. Furthermore, NAPL was not identified in the Newtown Creek sediments or underlying native material adjoining these potentially saturated landside areas. NAPL in the Holder areas is primarily in the shallow zone, above the meadow mat. The presence of a potentially saturated condition does not necessarily mean that the NAPL in the area will be mobile. A sufficient volume of NAPL is required to create a NAPL pressure head (driving force) which must exceed the entry pressure of a porous media to become mobile as discussed in Section 8.2.1. Residual NAPL conditions do not have a sufficient head pressure to mobilize.

Mobile DNAPL is currently present at measurable thicknesses in two wells located in the southern portion of the Loading Platform Area and one well in the central portion of the Loading Platform Area. DNAPL thicknesses in two of the wells (GPEC-MW-01R and GPEC-MW205 are monitored on a monthly basis and is recovered when the thickness approaches the sump length. DNAPL is present in GPEC-MW-3D in the central portion of the Loading Platform Area. DNAPL was first observed in this well following redevelopment for the 2024/2025 additional groundwater sampling event. Recovery in GPEC-MW-3D began in March 2025 and DNAPL rebound rates will be monitored following the start of recovery in the well in March 2025. The DNAPL present in these two monitoring wells in the area also cannot account for the shallower sediment NAPL visual observations in Newtown Creek. The source of the potentially DNAPL-saturated sediment in Newtown Creek is likely historic releases to the Creek surface that migrated vertically to the sediment bed or migration from off-Site sources.

Residual NAPL impacts were found throughout the Loading Platform Area in the shallow and intermediate zones but were limited to the southern Loading Platform Area in the deep zone. Residual impacts were generally limited to the shallow zone in the Holder area in the areas investigated along Maspeth Avenue. Residual impacts were generally limited to the shallow and intermediate zones of Areas 7 and 8 in the interior of the Site.

Petroleum-related (non-MGP) impacts were also identified at the Site and were primarily located in the shallow and upper portions of the intermediate zone near the southern property boundary along Maspeth Avenue adjacent to off-Site former petroleum storage or refinery facilities. LNAPL was historically identified in two wells located in this area and two off-Site wells installed in the 1990s by others as part of a groundwater investigation related to UST removals. The impacts may be from an off-Site source or sources unassociated with the Site.

### *9.1.4. Soil*

Surface soil exceedances of the IUSCOs at the Site were identified in 13 of the 34 samples collected during the RI. Detections above the IUSCOs were generally limited to benzo(a)pyrene, a PAH, with two exceedances of arsenic and one exceedance of dibenz(a,h)anthracene. Additional exceedances of the IUSCOs and the RRSCOs were identified in supplemental samples collected in 2021 in the former public ballfield area.

Soil concentrations above the IUSCOs primarily included PAHs. In the shallow zone, PAH exceedances of the IUSCOs were identified throughout the Site. As would be expected, PAH exceedances generally

decreased with depth and were largely identified in areas with noted physical impacts. Areas of elevated concentrations generally corresponded to the areas of physical impacts described above. With the exception of four samples in the intermediate zone, PAH exceedances of the IUSCOs were mostly identified in the Loading Platform Area. In the deep zone, PAH exceedances of the IUSCOs were limited to the southern portion of the Loading Platform Area. Concentrations of BTEX above the IUSCOs were identified in a limited number (total of three) samples Sitewide.

Detections of metals in soil were mostly limited to the shallow zone. Detections in the intermediate or deep zones were limited to sporadic and relatively low detections of arsenic.

Detections of cyanide were few and relatively low in concentration. The cyanide detections were generally limited to the Site Interior and were confined to the shallow soil zone. Two of these detections in one area in the vicinity of the former purifiers were found along with bluish green stained soil indicative of purifier waste.

There have been no detections of pesticides or herbicides above the IUSCOs.

- There were no PCB detections in soil above the IUSCO of 25 mg/Kg, which is the applicable standard for the Site. PCB detections above the more stringent UUSCO of 0.1 mg/Kg were limited. The detections above the UUSCO (0.1 mg/Kg) were generally found within the shallow fill layer at the Site and, therefore were not likely the result of historical Site operations. In the Loading Platform Area adjacent to Newtown Creek, only one of the 100 soil samples collected exceeded the UUSCO (0.1 mg/Kg) for total PCBs. The concentration of total PCBs in this sample was significantly below the IUSCO (25 mg/Kg). None of the three surface soil samples collected in this area exceeded the UUSCO (0.1 mg/Kg) for total PCBs. Along the Maspeth Alignment, seven subsurface soil samples (out of 223 samples collected in the area) were above the UUSCO (0.1 mg/Kg) for total PCBs, all of which were significantly below the IUSCO (25 mg/Kg). One surface soil sample out of four samples collected in the area was above the UUSCO (0.1 mg/Kg) for total PCBs but was significantly below the IUSCO (25 mg/Kg). In the Site Interior, only 13 subsurface soil samples (out of 280 samples collected in the area) were above the UUSCO (0.1 mg/Kg) for total PCBs, all of which were significantly below the IUSCO (25 mg/Kg). Six surface soil samples out of 27 samples collected in the area were above the UUSCO (0.1 mg/Kg), all of which were significantly below the IUSCO (25 mg/Kg). Based on these results, no known migration pathways (subsurface, overland or storm sewer) for PCB contamination in soil to either Newtown Creek or English Kills have been identified.

### *9.1.5. Groundwater*

Groundwater concentrations above the AGWQS primarily included BTEX, PAHs, and CVOCs. The areas of elevated BTEX and PAH concentrations were primarily located near the southern Loading Platform Area in the vicinity of the identified soil impacts and along the southern property boundary. The elevated BTEX and PAH concentrations along the southern property boundary in the shallow zone were significantly higher than other concentrations at the Site. The impacts are likely from an off-Site source or sources but may be comingled with Site-related impacts. Concentrations of CVOCs above the AGWQS

were more prevalent in the intermediate and deep zones and were generally found along the northern and western Site perimeters. The CVOCs are associated with off-Site sources as discussed below.

Groundwater concentrations of BTEX, PAHs and CVOCs were generally observed to be significantly lower during the 2024/2025 additional groundwater sampling event primarily, as compared to the PDI and RI phases primarily conducted from 2009 through 2012. The identified areas of impacts are generally the same as those identified previously, but lesser in areal extent as well as concentration.

PCB detections above the AGWQS of 0.09 µg/L in groundwater were limited to three wells, one of which was nd when it was resampled. PCBs were not detected in 145 out of 148 of the groundwater samples analyzed during the PDI and RI phases. The two other detections above the AGWQS were likely the result of entrained sediment within the sample and are not part of the dissolved groundwater fraction. No detections of PCBs were observed in the 93 samples collected during the additional sampling program. The results of the investigations demonstrate that groundwater discharging from the Site to either Newtown Creek or English Kills is not a source of PCB contamination.

Detections of total metals above the AWGQS were found throughout the Site. Many of these exceedances are associated with natural conditions. The metals detections in groundwater are not believed to be associated with historical Site Operations.

PFAS impacts were not investigated during the RI and PDI phases and were analyzed in a subset of wells during the 2024/2025 additional investigation (~35%). PFAS impacts were identified above the established criteria; however, the highest concentrations were located near the upgradient boundaries of the Site indicating upgradient sources migrating onto the Site.

### *9.1.6. Soil Vapor*

Potentially MGP- or petroleum-related chemicals were detected at concentrations above NYSDOH background values in SV or indoor at two buildings on-Site. These include the Transportation Building and the western portion of the Stores Building. Chlorinated compounds and other VOCs were also identified in both buildings.

In the Transportation Building, the elevated concentrations were generally identified in the SV and were mostly isolated to the southwestern portion of the building. USTs were previously removed outside the building in this area and free product (LNAPL) has also been historically noted in monitoring wells in the vicinity.

The elevated concentrations of the potentially MGP- or petroleum-related chemicals and the other VOCs in the Stores Building were mostly identified in the IA samples and were either not detected in the co-located SV samples or were detected at lower concentrations. The elevated concentrations of the chlorinated compounds were mostly in the SV samples.

There were no other elevated concentrations of potentially MGP- or petroleum-related compounds detected in the IA or SS samples from the remaining buildings on-Site.

Several other VOCs were detected at elevated concentrations in IA or SV in several other buildings on-Site. The majority of these concentrations were higher in the IA samples then in the co-located SV samples, indicating that the elevated IA concentrations are not the result of vapor intrusion.

Elevated concentrations of chlorinated compounds in other buildings were identified in indoor or SV samples collected from the Facilities Building, Building 11, the Gatehouse, the LNG Guard House, and the LNG North Storage Building. Several of these buildings were resampled to confirm earlier detections. Three additional sampling events were conducted at the Facilities Building.

Mitigation was recommended based on the concentration of chlorinated compounds in three buildings. Additional recommendations due to detections of chlorinated compounds included identifying sources and resampling or mitigation in one building (Gatehouse) and resampling during the heating season in another building (Facilities). The additional sampling for these two buildings was conducted in early 2021. The additional sampling in 2021 showed no elevated concentrations of TCE in IA in the Gatehouse; therefore, no further action is recommended.

Based on the results of the investigations, SSDSs were installed in the Facilities Building as a conservative safety measure and in Building 11. Periodic monitoring is currently being conducted in the Stores and Transportation Buildings in lieu of SSDS installations based on the construction of the buildings as well as other factors. The SSDS installation and periodic monitoring plan was agreed upon in consultation with NYSDEC and NYSDOH. SSDS operations are summarized in an annual report and the periodic monitoring results are provided in semi-annual reports to NYSDEC and NYSDOH.

## 9.2. Conclusions

The conclusions described below have been developed by GEI based on the findings from the investigations.

### *9.2.1. NAPL Sources*

No potentially mobile NAPL in soils landside of the Loading Platform have been identified that can impact the sediments or the water column of Newtown Creek. The source of NAPL impacts within the Newtown Creek sediment Loading Platform is likely attributed to historic releases to the Creek surface that migrated vertically to the sediment bed in this area or from other non-MGP sources adjacent to the creek and is not associated with lateral migration of the deeper NAPL found inland on-Site. It is assumed that the sediment beneath the Loading Platform which is also part of Newtown Creek is similarly impacted, as they are directly connected. Excluding two areas discussed below, the NAPL-affected areas identified in the adjacent landside borings and wells in the Loading Platform Area were found at depths substantively deeper than the NAPL visually observed near the native sand and accumulated sediment interface in Newtown Creek. The NAPL does not appear to be mobile in the two landside areas where potentially DNAPL-saturated soil was identified above the native sand and accumulated sediment interface due to a lack of NAPL accumulation in recovery or monitoring wells screened across potentially saturated zones and a lack of potentially DNAPL-saturated soil in surrounding delineation borings. Furthermore, potentially saturated NAPL is not present in sediment in adjoining areas in Newtown Creek. This illustrates that the NAPL in the Newtown Creek sediments did not originate from lateral

migration from the Site because there is no pathway present for migration. The presence of a potentially saturated condition does not necessarily mean that the NAPL in the area will be mobile. A sufficient volume of NAPL is required to create a NAPL pressure head (driving force) which must exceed the entry pressure of a porous media to become mobile. Residual NAPL conditions do not have a sufficient head pressure to mobilize.

DNAPL identified in the native material below Newtown Creek sediments primarily begins at the depth of the historic creek bottom (following the dredging prior to the construction of the MGP) indicating that the source of DNAPL impacts in this zone is also likely attributed to historic releases to the Creek surface and from releases from off-Site sources within Newtown Creek that may be associated with sediment deposition in the area adjacent to and beneath the Loading Platform. The area of Newtown Creek adjacent to and beneath the Loading Platform is a documented depositional area, as evidenced by the approximate 16 feet of sediment that has accumulated since the creek was last dredged. Any DNAPL that was spilled in the period immediately following the dredging would have reached the historic creek bottom and migrated downward. The intermittent NAPL-impacted zones at these depths are likely due to typical vertical migration patterns for DNAPL within soil or sediment.

No source of NAPL in subsurface soils has been identified landside of the southern portion of the Loading Platform where areas of potential NAPL saturation have been identified and where mobile NAPL is currently being recovered from two wells. The nearest possible source of contamination would be the former tar storage tank associated with the by-products building which was formerly approximately 500 feet to the west and was removed in 1957. The former tar storage tanks and other former tar-handling structures in the area located farther north were all located a significant distance from current edge of Newtown Creek adjacent to the Site, because the area along the Loading Platform was used for storage of coal and coke. However, borings advanced between the former tar tank and the southern NAPL-saturated area did not show NAPL impacts that would indicate a possible migration pathway from the former tar storage tank. Mobile NAPL is also being recovered from one well farther north along the Loading Platform; however, similar to the NAPL-affected areas farther south, no migration pathways have been identified for the NAPL in this well or for other NAPL-saturated areas located farther north in the Loading Platform Area.

NAPL identified in the Holder 1 area is primarily shallow, located above the organic layer (meadow mat) present in the area. The source of NAPL in shallow soils in this area is attributed to historical operations of the former gas holders. The shallow NAPL has been delineated by surrounding borings that are free of NAPL saturation. Lateral delineation of NAPL in the area included borings that were advanced as part of the Equity RI on the properties located on the opposite side of Maspeth Avenue. A limited area of deeper NAPL to the west of Holder 1 is attributed to migration from Equity to the GPEC property. No subsurface migration pathways for NAPL from the GPEC Site to the Equity site or from the Equity site to English Kills have been identified.

### *9.2.2. Soil*

Surface soil exceedances at the Site were limited and are likely the result of the fill layer present at the Site or in the case of arsenic may also be related to former coal heating operations. Compounds exceeding the applicable criteria primarily included benzo(a)pyrene, along with arsenic and

dibenz(a,h)anthracene in two samples and one sample, respectively. Additional exceedances were also identified during a supplemental investigation conducted in 2021 in the former public ballfield area.

Subsurface soils at the Site appear to be impacted from historic Site operations. As stated above, PAHs were the primary contaminant identified during the investigation. PAH exceedances of the IUSCOs were identified throughout the Site. Areas of elevated concentrations generally corresponded to the areas of physical impacts described above. Soil quality was likely affected by an off-Site source or sources in the southern portion of the Site in the area where sheens were identified within the soil and LNAPL was identified in two wells. As stated earlier, the LNAPL is attributed to an off-Site source or sources. Based on its location, the source of the impacts may be BCF but could include the Gulf Oil Refining Company/Ditmas Terminal Site or other facilities formerly located in the area.

Based on the limited detections of total PCBs above UUSCOs (0.1 mg/Kg), and the fact that no detections above the IUSCOs (25 mg/Kg) were identified in soil in the Loading Platform Area and along the Maspeth Alignment, as well as in the Site Interior, there are no known migration pathways (subsurface, overland or storm sewer) for PCB contamination to either Newtown Creek or English Kills.

### *9.2.3. Groundwater*

The BTEX and PAH concentrations in the area along the southern property boundary were significantly higher than other areas of the Site, and along with the LNAPL historically identified in wells in the area, are likely from an off-Site source or sources, but may be comingled with Site-related impacts. Based on its location and similar to the soil impacts described above, the source of the groundwater impacts may be BCF. Additional petroleum sites that could be sources adjacent to Maspeth Avenue include the Gulf Oil Refining Company/Ditmas Terminal Site or other facilities formerly located in the area. BTEX and PAH impacts in the remaining portions of the Site are likely Site-related.

Based on the groundwater flow at the Site and the elevated detections of BTEX and PAHs identified in the Loading Platform Area, there is the potential for these dissolved-phase contaminants to discharge into Newtown Creek. However, these dissolved-phase contaminants must pass through NAPL-impacted sediment prior to discharge. As stated above, there have been no migration pathways identified from the Site to sediments in Newtown Creek. As stated above, the source of NAPL impacts in Newtown Creek sediments, which have accumulated since the Creek was dredged, likely is attributed to historic releases or by migration from other sources. The NAPL-impacted sediments are being addressed as part of the CERCLA remedy for the Newtown Creek Site.

CVOCs are not related to former Site operations, they are attributed to an off-Site source or sources. A PCE and TCE plume has previously been documented in the areas where elevated CVOCs were identified on-Site, mostly along the northern and western property boundaries. In addition, several PRPs whose uses have included CVOCs have been identified in the area.

Groundwater concentrations of BTEX, PAHs and CVOCs were generally observed to be significantly lower during the additional groundwater sampling event primarily conducted in late 2024, as compared to the PDI and RI phases primarily conducted from 2009 through 2012 suggesting that natural attenuation is

occurring. The identified areas of impacts are generally the same as those identified previously, but lesser in areal extent as well as concentration.

PCB detections above the AGWQS in groundwater were limited to three wells of the 238 samples collected, one of which was not detected when it was resampled. The two other detections above the AGWQS were likely the result of entrained sediment within the sample. Since the groundwater impacts are likely due to entrained sediment and are not part of the dissolved phase groundwater fraction, the result of the investigation demonstrates that groundwater discharging from the Site to either Newtown Creek or English Kills is not a source of PCB contamination.

### *9.2.4. Soil Vapor*

Based on the results of the SVI investigation performed in occupied buildings on-Site, SVI does not appear to be occurring. In instances where elevated detections were identified in SV, the corresponding detections in IA were generally lower and in instances where elevated detections were identified in IA, the corresponding detections in SV were generally lower. However, based on the elevated detections of several chlorinated compounds in SV in three buildings (Transportation and Stores Buildings and Building 11), mitigation was recommended. Additional recommended actions include identify sources and resample or mitigate based on the concentrations of TCE (Gatehouse Building) and resampling during the heating season (Facilities Building). No further action is recommended for the remaining nine buildings. Additional sampling was conducted in the Gatehouse Building and the Facilities Building in early 2021 in accordance with a NYSDEC-approved work plan. Based on those results, no further action was recommended for the Gatehouse Building and mitigation was recommended for the Facilities Building as a conservative safety measure.

Following the investigations, SSDSs were installed in the Facilities Building as a conservative safety measure and in Building 11. Periodic monitoring is currently being conducted in the Stores and Transportation Buildings in lieu of SSDS installations based on the construction of the buildings as well as other factors. The SSDS installation and periodic monitoring plan was agreed upon in consultation with NYSDEC and NYSDOH. The results of the SSDS and periodic monitoring results will continue to be evaluated to determine if additional steps are necessary.

### *9.2.5. Qualitative Human Health Exposure Assessment*

There are potentially complete pathways for human receptors to come into contact with chemical compounds at the Site. Outdoor workers, visitors/trespassers or potential future construction workers could be exposed to contaminants in surface soil on-Site through direct contact or ingestion. Inhalation of impacted surface soil is possible if contaminants become airborne. A large portion of the Site is covered with buildings, roads, gravel, or vegetated surfaces reducing the possibility of impacted surface soil becoming airborne. In the active areas of the western portion of the Site, measures are taken to reduce dust generation. In the area of impacted surface soil near the LNG tanks vehicle traffic is minimal; however, if dust generation is likely, similar measures should be taken. Dust is not currently being generated in these areas of the Site. However, the pathway is potentially complete as the potential for dust generation is present.

The use of the ballfield by the public has been discontinued. Visitors to the former public ballfield may also be exposed to impacted surface soil; as such, the exposure pathway in this area is potentially complete. However, the ballfield area is fenced and locked, thereby limiting the chance for exposure. Furthermore, the exceedances of the IUSCOs are generally in the deeper intervals and the areas with exceedances in the shallow sampling interval are generally covered with grass. However, the ballfield area is fenced and locked, thereby limiting the chance for exposure. Furthermore, the exceedances of the IUSCOs are generally in the deeper intervals and the areas with exceedances in the shallow sampling interval are generally covered with grass.

A potentially complete exposure pathway to impacted SV is present to Site indoor workers or visitors if the conditions of the foundation of several buildings change. Periodic monitoring is performed in these buildings to continue to evaluate this exposure pathway.

Potential future construction workers who perform excavation work on the Site may also potentially be exposed to contaminants in subsurface soil, SV and groundwater if subsurface excavation work is needed at the Site.

### *9.2.6. Fish and Wildlife Resources Impact Analysis*

There is minimal to no risk for ecological receptor impacts at the Site given the lack of habitat, the industrial nature of the RI Study Area, and the transient nature of wildlife in urban areas. However, Newtown Creek is a potential resource near the Site. Migration pathways from the Site that may result in actual or potential continuing impacts to Newtown Creek resources appear absent or insignificant in comparison to the impacts present in the creek from numerous sources. Newtown Creek impacts are being addressed as part of the ongoing CERCLA process and further evaluation is best considered in that context.

# 10. References

AECOM Corporation (2009). "Remedial Investigation Work Plan. Equity Former Manufactured Gas Plant." Prepared for National Grid.

AECOM Corporation (2016). "Remedial Investigation Report – Final. Former Equity Works Manufactured Gas Plant." Prepared for National Grid.

Aerial Photographs of National Grid – Greenpoint, Brooklyn, NY provided by Environmental Research Inc., Linden, VA; years 1943, 1949, 1957, 1959, 1961, 1964, 1965, 1966, 1974, 1975, 1977, 1980 and 2008.

Anchor Environmental (2007). "Draft Remedial Investigation Report, Operable Unit 6, Laurel Hill Site, Maspeth, New York." Prepared for Phelps Dodge Refining Corporation, May 2007.

Anchor QEA (2011). "Data Collection Plan. Remedial Investigation/Feasibility Study, Newtown Creek." October 2011.

Anchor QEA (2012). "Data Applicability Report. Remedial Investigation/Feasibility Study. Newtown Creek." May 2012.

Anchor QEA (2012). "Former B.C.F. Oil Refining, Inc. Draft Upland Site Summary." May 2012.

Anchor QEA (2017). "Baseline Human Health Risk Assessment, Remedial Investigation/ Feasibility Study, Newtown Creek." June 2017.

Anchor QEA (2018). Baseline Ecological Risk Assessment, Remedial Investigation/ Feasibility Study, Newtown Creek." October 2018.

Brock, P. C., and P. W. G. Brock, 2001. "Bedrock Geology of New York City: More than 600 m.y. of geologic history" - "Field Guide for Long Island Geologists Field Trip October 27, 2001." Pp. 17. Accessed June 17, 2015. http://www.geo.sunysb.edu/reports/ny-city/.

Brooklyn Union Gas Company (1926). Report to the Public Service Commission of the State of New York for the Year ended December 31, 1926.

Brooklyn Union Gas Company (multiple) Report to the State of New York, Department of Public Service, Public Service Commission for the Year ended December 31, 19--; years 1927 through 1988.

Brooklyn Union Gas (1979). Memo about BUG Naphtha Study Boring Results, March 6.

Busciolano, R., 2002. "Water-Table and Potentiometric-Surface Altitudes of the Upper Glacial, Magothy, and Lloyd Aquifers on Long Island, New York, in March-April 2000, with a Summary of Hydrogeologic Conditions." United States Geological Survey. Water-Resources Investigations Report 01-4165.

Busciolano, R., Monti, J. Jr., Chu, A., 1998. Water-Table and Potentiometric-Surface Altitudes of the Upper Glacial, Magothy, and Lloyd Aquifers on Long Island, New York, in March-April 1997, with a Summary of Hydrogeologic Conditions." USGS Water-Resources Investigations Report 98-4019.

Buxbaum R. (2011). Peter Cooper, Citizen Industrialist: a Biography Timeline.

Buxton, H. T., J. Soren, A. Posner, and P. K. Shernoff, 1981. "Reconnaissance of the Ground-Water Resources of Kings and Queens Counties, New York." United States Geological Survey Open-File Report 81-1186.

Buxton, H.T. and Shernoff, P.K., 1999. "Ground-water Resources of Kings and Queens Counties, Long Island, New York." USGS Water Supply Paper 2498.

Caldwell D. (1989). "Surficial Geologic Map of New York, Lower Hudson Sheet." The State Education Department, University of the State of New York, 1989.

Cartwright, R. A., 2002. "History and Hydrologic Effects of Ground-Water Use in Kings, Queens, and Western Nassau Counties, Long Island, New York, 1800s through 1997." United States Geological Survey Water-Resources Investigations Report 01-4096.

Cowardin L.M., et al (1979). "Classification of Wetlands and Deepwater Habitats of the United States." U.S. Fish and Wildlife Service.

EEA, Inc. (2004). "Phase II Environmental Subsurface Investigation, Property Located at 254 Maspeth Avenue, Brooklyn, New York." Prepared for Spencer Realty Corporation and Copper Tank and Welding, October 26.

Fanning, Phillips and Molnar (1993). "Field Reports for the Underground Storage Tank Area Groundwater Investigation at the Brooklyn Union Gas Company, Greenpoint Facility." Prepared for the Brooklyn Union Gas Company, December 7.

Fanning, Phillips and Molnar (1993). "Installation of Groundwater Monitoring Wells at Transportation Building Southwest Corner Underground Storage Tank Area, Greenpoint Facility, Brooklyn, New York" (proposal). Prepared for Brooklyn Union Gas Company, September 21.

Fanning, Phillips and Molnar (1995). "Field Reports for the Underground Storage Tank Area Groundwater Investigation at the Brooklyn Union Gas Company, Greenpoint Facility." Prepared for the Brooklyn Union Gas Company, February 27.

Gannet Fleming Engineers, P.C. (2004). "Phase I Environmental Site Assessment Report for 254 Maspeth Avenue Property." Prepared for Cooper Tank and Welding Corp., November 5.

Gannet Fleming Engineers, P.C. (2005). "Phase II Environmental Site Investigation Summary." Prepared for Cooper Tank and Welding Corp., May 12.

Gannet Fleming Engineers, P.C. (2006). Sheet 1: Proposed Soil Boring Location Plan. Non Putrescible Solid Waste Transfer Station. Prepared for Cooper Tank and Welding Corp., April 2006.

GEI Consultants (2009). "Pre-Design Investigation Work Plan." Prepared for National Grid, January 9.

GEI Consultants (2010). "Supplemental Pre-Design Investigation Work Plan." Prepared for National Grid, April 8.

GEI Consultants (2010). "Assessment of Human Health Risk, Greenpoint Energy Center Baseball Field." Prepared for National Grid, December 1.

GEI Consultants (2012). "Remedial Investigation Work Plan." Prepared for National Grid, June 12.

GEI Consultants (2013). "Phase 2/3 Remedial Investigation Work Plan." Prepared for National Grid, November 26.

GEI Consultants (2015). "Boring Location Selection Plan – Phase 2 Remedial Investigation." Prepared for National Grid, January 30.

GEI Consultants (2016). "Phase 2 Additional Borings, Phase 2 Data Submittal, and Phase 3 Test Pit Plan – Phase 2/3 Remedial Investigation." Prepared for National Grid, February 25.

Geraghty and Miller, Inc. (1979). "Investigation of Underground Accumulation of Hydrocarbons along Newtown Creek, Brooklyn, New York." Prepared for the U.S. Coast Guard, July 1979.

Groundwater Technology (1995). "Brooklyn Union Greenpoint Facility UST Abandonment Report." A Letter Response to NYSDEC, May 15.

Guswa, Dr. John H. and Dr. Bernard H. Kueper, 2003. Site Characterization and Remediation Techniques for DNAPLs and Associated Dissolved Phase Contamination, Rensselaer at Hartford, Hartford, Connecticut, February 2003.

HabitatMap (2012). Meeker Ave PCE/TCE Plume Map. Accesses April 30, 2012. http://habitatmap.org/habitatmap_docs/MeekerAvePCETCEPlume.pdf.

Lexicon Environmental Associates, Inc. (1993). "Underground Storage Tank Closures." Prepared for the Brooklyn Union Gas Company, October 18.

Lexicon Environmental Associates (1993). "Underground Storage Tank Closures, Brooklyn Union Gas Greenpoint Service Center, Brooklyn, New York." Prepared for Brooklyn Union Gas, October 18.

Malcolm Pirnie, Inc. (2008). "Remedial Investigation and Feasibility Study Work Plan. BCF Oil Site." Prepared for NYSDEC, September 2008.

Malcolm Pirnie, Inc. (2010). "Remedial Investigation Report. BCF Oil Site." Prepared for NYSDEC, December 2010.

Miller Environmental Group (2002). Soil Sample Results (analytical laboratory results), December 5.

Miller Environmental Group (2003). "Preliminary Subsurface Investigation at the Greenpoint Operation Center." Letter Report, January 10.

New York City Department of City Planning (2011) Zoning Maps (accessed July 22, 2011). http://www.nyc.gov/html/dcp/pdf/zone/map13a.pdf

New York Public Library Digital Collection, Atlas of the entire city of Brooklyn - Bromley - 1880 [Plate 26].

New York Public Library Digital Collection, Estate & Farm Line of Brooklyn Vol. 2- Hopkins - 1880 [Plate C].

New York Public Library Digital Collection, Atlas of Brooklyn - Robinson - 1886 [Plate 13, 16].

New York Public Library Digital Collection, Atlas 89 Vol. 9 - Sanborn - 1888 [Plates 237, 240, 242, 244].

New York Public Library Digital Collection, Atlas of the Brooklyn Borough of the City of New York, Ullitz H. 1898-99 [Plate 36].

New York Public Library Digital Collection, Atlas of the Borough of Brooklyn, Vol. 3 - Hyde. 1904 [Plates 16, 18, 19, 20].

New York Public Library Digital Collection, Atlas 90 Vol. 9, Sanborn - 1907 [Plates 68, 71, 73, 74, 75, 77, 81].

New York Public Library Digital Collection, Atlas of the Borough of Brooklyn, Vol. 1 - Bromley. 1907-1908 [Plates 13, 16].

New York Public Library Digital Collection, Atlas of the Borough of Brooklyn Vol. 1 - Hyde. 1916 [Plates 35, 36].

New York Public Library Physical Collection, Atlas of the Borough of Brooklyn - Bromley, 1893.

New York Public Library Physical Collection, Atlas of the Borough of Brooklyn Vol. 3 - Hyde, 1904.

New York Public Library Physical Collection, Desk Atlas of the Borough of Brooklyn Vol. 2 - Hyde, 1921.

New York Public Library Physical Collection, Desk Atlas of the Borough of Brooklyn Vol. 2 - Hyde, 1929.

New York State Department of Environmental Conservation (NYSDEC), 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Division of Water Technical and Operational Guidance Series (1.1.1), June.

New York State Department of Environmental Conservation (NYSDEC) 2006. Remedial Program Soil Cleanup Objectives, Environmental Conservation Law, Chapter IV, Subpart 375-6.

New York State Department of Environmental Conservation (NYSDEC) 2010. DER-10 Technical Guidance for Site Investigation and Remediation.

NYSDEC (2010) Response to FOIL Request No. 10-163, Completion Report – Long Island Well K3504.

NYSDEC (2010) "DER-10: Technical Guidance for Site Investigation and Remediation." May 2010 Edition.

NYSDEC (2012) Spill Incidents Database Search. Accessed February 10 and April 30, 2012. http://www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=2.

NYSDEC (2012) Greenpoint Petroleum Remediation Project. Project Status. Accessed on April 30, 2012 and June 20, 2016. http://nysdecgreenpoint.com/.

Paulus, Sokolowski and Sartor Engineering (2001). Proposal and correspondence regarding the Maspeth Gas Holders Implosion and subsequent Former Greenpoint Compressor Station Remediation and Dismantling. Prepared for KeySpan, 2004.

Paulus, Sokolowski and Sartor Engineering (2004). "DRAFT Preliminary Site Investigation Report for the Greenpoint Energy Center proposed Liquefaction Plant Replacement Area, Brooklyn, New York." Prepared for KeySpan, June 2004.

Paulus, Sokolowski and Sartor Engineering (2006). "IRM Completion Report for the Greenpoint Energy Center Northeast Corner, Greenpoint, Brooklyn, NY." Prepared for KeySpan, June 2006.

Paulus, Sokolowski and Sartor Engineering (2009). "Final Supplemental Site Investigation/ Supplemental Interim Remedial Measure Completion Report." Prepared for National Grid, November 2009.

Phelps Dodge Refining Corp. (2012). "PDRC Former Laurel Hill Draft Upland Summary Report." May 2012.

Roux Associates, Inc. (1990). "Ground-Water Contingency Plan for the Brooklyn Union Gas Company Petroleum Bulk Storage Facility." Prepared for Brooklyn Union Gas. August 27, 1990.

Sanborn Fire Insurance Maps of Greenpoint Energy Center, Brooklyn, NY provided by Environmental Data Resources; years 1888, 1907, 1933, 1951, 1965, 1968 and 1972.

Sanborn Fire Insurance Maps, Volume 3, Borough of Queens.

Texaco, Inc. (2012). "Former Gulf Oil Terminal (Former Terminyx Corp. and Former Ditmas Oil Assoc. Inc.). Draft Upland Site Summary." May 2012.

URS Corporation (2008). "Site Characterization, Soil Vapor Intrusion Data Summary Report, February-March 2008, Meeker Avenue Plum Trackdown Greenpoint/ Williamsburg Industrial Area." Prepared for NYSDEC, June 2008.

URS Corporation (2009). "Site Characterization, Phase IV Data summary Report, Meeker Avenue Plume Trackdown Greenpoint/Williamsburg Industrial Area." Prepared for NYSDEC, May 2009.

URS Corporation (2009). "Site Characterization, Phase V Data summary Report, Meeker Avenue Plume Trackdown Greenpoint/Williamsburg Industrial Area." Prepared for NYSDEC, October 2009.

U.S. Environmental Protection Agency (2006). "Region II Functional Guidelines for Evaluating Organic Analyses." September 2006.

U.S. Environmental Protection Agency (2006). "Region II Standard Operating Procedure for the Evaluation of Metals for the Contract Laboratory Program." SOP, HW-2, Revision 13, September 2006.

U.S. Environmental Protection Agency (2006). "Region II Functional Guidelines for Evaluating Organic Analyses." September 2006.

U.S. Environmental Protection Agency (2007). "Newtown Creek/Greenpoint Oil Spill Study."

U.S. Geological Survey (1986). "Thickness and Hydrogeology of Aquifers and Confining Units below the Upper Glacial Aquifer on Long Island, New York." J. Soren and D. Simmons, USGS Publication 86-4175.

U.S. Geological Survey (1986). "Water Table of the Upper Glacial Aquifer on Western Long Island, New York, in March-April 1997." R. Busciolano et al. 1997.

USEPA – Region 2 (2011). "Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study." Newtown Creek Superfund Site.

Vanasse Hangen Brustlin, Inc. (2001). "Maspeth Holder Demolition Environmental Impact Report." Prepared for KeySpan Corporation, September 2001.

# Tables

**Table 1 On-Site Spill Summary**

**Table 2 Identified Potentially Responsible Parties – Parcels Within Approximately 500 feet**

**Table 3 Sampling Rationale**

**Table 4 Monitoring Well Construction Details and Groundwater Elevations Summary**

**Table 5 DNAPL Monitoring Summary**

**Table 6 Estimated Hydraulic Conductivity Values**

**Table 7 Summary of Calculated Horizontal Hydraulic Aquifer Properties**

**Table 8 Summary of Calculated Vertical Hydraulic Gradients**

**Table 9 Surface Soil Analytical Results**

**Table 10 Subsurface Soil Analytical Results – Loading Platform Area**

**Table 11 Subsurface Soil Analytical Results – Maspeth Alignment**

**Table 12 Subsurface Soil Analytical Results – Site Interior**

**Table 13 Typical Metals Background Concentrations – Eastern United States**

**Table 14 Groundwater Analytical Results – Loading Platform Area**

**Table 15 Groundwater Analytical Results – Maspeth Alignment**

**Table 16 Groundwater Analytical Results – Site Interior**

**Table 17 Soil Intrusion Investigation Analytical Results**

**Table 18 Forensic Soil Analytical Results**

**Table 19 Forensic NAPL Analytical Results**

**Table 20 Statistical Exceedance Summary**

**Table 21 Sediment Sample Results**

**Table 1. On-Site Spill Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Spill Number | Date Spill Reported | Spill Name | Address | Status |
|---|---|---|---|---|
| 9009058 | 11/16/1990 | CLOSED-LACKOF RECENT INFO | 287 MASPETH AVENUE | closed |
| 9111530 | 2/7/1992 | 287 MASPETH AVE/GREENPOINT | 287 MASPETH AVE/GREENPT | closed |
| 9211562 | 1/7/1993 | KEYSPAN ENERGY | 287 MASPETH AVENUE | closed |
| 9301329 | 4/28/1993 | 287 MASPETH AVE | 287 MASPETH AVENUE | closed |
| 9305107 | 7/23/1993 | BROOKLYN UNION GAS | 287 MASPETH AVENUE | closed |
| 9606233 | 8/14/1996 | BROOKLYN UNION GAS | 287 MASPETH AVENUE | closed |
| 9714234 | 3/24/1998 | BROOKLYN UNION | 287 MASPETH AVENUE | closed |
| 4653 | 7/18/2000 | KEY SPAN | 287 MASPETH AVENUE | closed |
| 104143 | 7/18/2001 | GREENPOINT ENERGY CTR | 287 MASPETH AVENUE | closed |
| 106270 | 9/13/2001 | KEYSPAN GREENPOINT | 287 MASPETH AVENUE | closed |
| 202908 | 6/19/2002 | KEY SPAN GREENPOINT OPER | 287 MASPETH AVENUE | closed |
| 303442 | 7/2/2003 | GREENPOINT KEY SPAN | 287 MASPETH AVENUE | closed |
| 310061 | 11/26/2003 | SUBSTATION | 287 MASPETH AVENUE | closed |
| 413650 | 3/31/2005 | KEYSPAN COMPLEX | 287 MASPETH AVENUE | closed |
| 908424 | 10/27/2009 | DRUM RUN | 287 MASPETH AVE | closed |
| 908872 | 11/7/2009 | DRUM RUN | 287 MASPETH AVE | closed |
| 1006581 | 9/17/2010 | NAT GRID GREEN POINT FACILITY | 287 MASPETH AVE | closed |
| 1012824 | 3/24/2011 | GREENPOINT YARD | 287 MASPETH AVE | closed |
| 1701762 | 5/23/2017 | SOIL | 287 MASPETH AVE | closed |
| 1903222 | 6/28/2019 | NATIONAL GRID | 287 MASPETH AVE | closed |
| 2005923 | 9/30/2020 | NATIONAL GRID PROPERTY | 287 MASPETH AVE | closed |
| 2006012 | 10/2/2020 | COMMERCIAL PROPERTY | 287 MASPETH AVE | closed |
| 2209155 | 2/13/2023 | STORE ROOM | 287 MASPETH AVE | closed |
| 2302839 | 7/8/2023 | CONCRETE | 287 MASPETH AVE | closed |
| 2305819 | 10/6/2023 | DRUM RUN | 287 MASPETH AVE | closed |
| 2306556 | 11/3/2023 | STORAGE YARD | 287 MASPETH AVE | closed |
| 2309575 | 3/8/2024 | COMMERCIAL | 287 MASPETH AVE | closed |
| 2400839 | 4/29/2024 | NATIONAL GRID FUEL STATION | 287 MASPETH AVE | closed |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-001 | 2811 | 14 | D.F.H Novelty Furniture Co. | Furniture mfg, Paint Spraying, 2 Gas Tanks | (1929-1951) | 11l, 11m, 11an | | |
| RAD-002 | 2811 | 14 | Acme Steel Products Co. | Metal mfg, Painting, Wood Working | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~400' cross gradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-002 | 2822 | 1 | Acme Steel Corp., Acme Architectural Walls | Manufacturing LTANK/ LQG | (1978-1999) | 11as | Long duration, ~100' cross gradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-003 | 2812 | 1 | American Freightways Co. | Auto Shop, Parts | (1965-1993) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ap | Long duration, ~300' cross gradient, potential for impacts | Petroleum |
| RAD-003 | 2812 | 3 | American Freightways Co. | Auto Shop, Parts | (1965-1993) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ap | Long duration, ~400' cross gradient, potential for impacts | Petroleum |
| RAD-003 | 2812 | 5 | American Freightways Co. | Auto Shop, Parts | (1965-1993) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ap | Long duration, ~400' cross gradient, potential for impacts | Petroleum |
| RAD-004 | 2814 | 6 | Unknown | Boiler Works | (1933-1951) | 11l, 11m | | |
| RAD-005 | 2814 | 6 | Unknown | Putty mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-006 | 2814 | 6 | Unknown | Garbage Transfer Station | (1990-2007) | 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |
| RAD-007 | 2814 | 10 | Non Ferrous Processing Corporation | Manufacturing/ LQG | (1999-2005) | 11as | | |
| RAD-008 | 2814 | 10 | Unknown | Bicycle Cement Factory | (1904) | 11f, 11al | | |
| RAD-009 | 2814 | 10 | L.F. Rand and Co. | Insulating Compounds | (1907) | 11g, 11k | | |
| RAD-010 | 2814 | 10 | Curtis Electro NY Inc. | Light Fixture mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~300-400' cross gradient, potential for impacts | Petroleum, oils, unknown chemical use |
| RAD-011 | 2814 | 18 | Unknown | Motor Freight Station | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-012 | 2815 | 1 | Unknown | Commercial (Motor Freight) | (1970's to present) | 11as | | |
| RAD-012 | 2815 | 2 | Unknown | Motor Freight Station, Auto Repair | (1968-2007) | 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-013 | 2815 | 1 | Fleer Bros./ Burns Bros. | Coal Yard | (late 1920's to 1970's) | 11as | | |
| RAD-013 | 2815 | 2 | Fleer Bros. | Coal Yard, Auto Repair | (1929-1933) | 11l, 11an | | |
| RAD-014 | 2815 | 2 | Unknown | Factory | (1886) | 11c | | |
| RAD-014 | 2815 | 3 | Unknown | Factory | (1886) | 11c | | |
| RAD-015 | 2815 | 2 | Former Manhattan Queens | Abandoned Warehouse Unknown/ Spill | (1998) | 11as | | |
| RAD-016 | 2815 | 3 | Wiarda & Hall Acid Works Inc. | Acid Works, Gas Tank | (1929-1933) | 11l, 11an | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-017 | 2815 | 3 | Unknown | Fat Rendering, Gas Tank | (1951) | 11m | | |
| RAD-018 | 2815 | 3 | Unknown | Aluminum Smelting, Scrap Metal Storage | (1965-1982) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | | |
| RAD-019 | 2815 | 50 | Unknown | Motor Freight Station | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-020 | 2815 | 60 | Unknown | Motor Freight Station | (1965-1994) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ap | | |
| RAD-021 | 2815 | 60 | Acme Architectural, Q.M.T., Inc | LTANK/ UST | (1994-1999) | 11as | Short duration, ~100' cross gradient, potential for impacts | Petroleum |
| RAD-022 | 2819 | 8 | J. Cutler/ Unknown | Iron Works | (1929-2007) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11an, 11ap | | |
| RAD-023 | 2819 | 11 | Unknown | Painting, Steel Storage | (1965-1981) | 11n, 11n, 11o, 11p, 11q, 11r, 11s | | |
| RAD-024 | 2819 | 11 | Unknown | Metal Products mfg, Painting, Steel Storage | (1968-2007) | 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Moderate duration, ~200-300' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-025 | 2819 | 25 | Unknown | Steel Storage Yard | (1933-1951) | 11l, 11m | | |
| RAD-026 | 2819 | 25 | Unknown | Wood Cabinet mfg | (1951) | 11m | | |
| RAD-027 | 2819 | 25 | Unknown | Metal Products mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Moderate duration, ~200-300' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-028 | 2819 | 31 | Unknown | Garage, Gas Tank | (1933-2006) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai | Long duration, ~250' upgradient, potential for impacts | Petroleum |
| RAD-029 | 2819 | 31 | Unknown | Warehouse, Gas Tank | (2007) | 11aj | | |
| RAD-030 | 2819 | 33 | Unknown | Cigar Factory | (1904-1921) | 11f, 11al, 11am | | |
| RAD-031 | 2819 | 33 | Unknown | Metal Stamping | (1951) | 11m | | |
| RAD-032 | 2819 | 33 | Unknown | Plastic Products mfg | (1965) | 11n | | |
| RAD-033 | 2819 | 33 | Unknown | Scrap Metal | (1968-2007) | 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~300' upgradient, potential for impacts | Metals |
| RAD-034 | 2819 | 36 | Unknown | Paint & Varnish mfg | (1933) | 11l | Short duration, ~400' upgradient, potential for impacts | Petroleum, solvents, dyes, |
| RAD-035 | 2819 | 36 | Unknown | Foundry | (1951) | 11m | | |
| RAD-036 | 2819 | 36 | Unknown | Manufacturing | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~400' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-037 | 2820 | 1 | Lubraa Oil Corp./ Malmstrom & Co. | Oil Compounding, Oil Tanks | (1933-1951) | 11l, 11m | Moderate duration, ~100' cross gradient, potential for impacts | Petroleum |
| RAD-038 | 2820 | 1 | Unknown | Drum Storage | (1965-1980) | 11n, 11o, 11p, 11q, 11r, 11ap | | |
| RAD-039 | 2820 | 5 | Unknown | Brass Foundry | (1965-1992) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ap | | |
| RAD-040 | 2820 | 5 | Unknown | Manufacturing | (1993-2007) | 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-041 | 2820 | 21 | Unknown | Manufacturing | (1972-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-042 | 2820 | 28 | Unknown | Motor Freight Station | (1965-1968) | 11n, 11o | | |
| RAD-043 | 2820 | 28 | Unknown | Auto Junk Yard | (1965-1968) | 11n, 11o | Short duration, ~100' cross gradient, potential for impacts | Petroleum, oils, metals |
| RAD-044 | 2820 | 28 | Unknown | Manufacturing | (1972-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-045 | 2821 | 1 | Unknown | Soap Powder mfg | (1951-1989) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11ap | Long duration, ~100' cross gradient, potential for impacts | Petroleum, oils, unknown chemical use |
| RAD-046 | 2821 | 1 | Alfred Chemical Corp., Chloral Chemical Corp. | Chemical/Paint Manufacturing/CBS AST | (1988-1994) | 11as | Short duration, ~100' cross gradient, potential for impacts | Chemicals, paints, petroleum |
| RAD-047 | 2821 | 11 | Superior Fiber Mil's Inc | Paper Products mfg | (1965-2013) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at | Long duration, ~100' cross gradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-048 | 2821 | 18 | Unknown | Motor Freight Station, Auto Repair | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~100' cross gradient, potential for impacts | Petroleum |
| RAD-049 | 2822 | 1 | Lally Column Company of N.Y. | Manufacturing | (1933-1968) | 11l, 11m, 11n, 11o | Long duration, ~100' cross gradient, potential for impacts | Petroleum, oils, unknown chemical use |
| RAD-050 | 2824 | 10 | Preston Trucking Company | Motor Freight Station, Truck Repair | (1965-2015) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at, 11au | Long duration, ~100' cross gradient, potential for impacts | Petroleum |
| RAD-051 | 2824 | 10 | Tose-Fowler, Inc. | Vacant Truck Terminal/ UST | (1988) | 11as | Short duration, ~100' cross gradient, potential for impacts | Petroleum |
| RAD-052 | 2835 | 12 | Unknown | Laundry | (1933) | 11l | | |
| RAD-053 | 2835 | 12 | Unknown | Brass Foundry | (1951) | 11m | | |
| RAD-054 | 2835 | 12 | Milgo/Bufkn | Steel Door & Buck mfg | (1951-2014) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at | | |
| RAD-055 | 2836 | 11 | Unknown | Drum Storage | (1951-2014) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at | | |
| RAD-056 | 2836 | 12 | Unknown | Steel & Heavy Timber Storage Yard | (1933-1951) | 11l, 11m | | |
| RAD-057 | 2836 | 12 | Unknown | Garage, 2 Gas Tanks | (1933-1951) | 11l, 11m | Moderate duration, ~100' upgradient, potential for impacts | Petroleum |
| RAD-058 | 2836 | 12 | Iberia Road Marking Corp. | Unknown | (1990-2007) | 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |
| RAD-059 | 2836 | 20 | Unknown | Steel & Heavy Timber Storage Yard | (1933-1951) | 11l, 11m | | |
| RAD-060 | 2836 | 20 | Unknown | Manufacturing | (1977-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |
| RAD-061 | 2842 | 3 | Unknown | Machine Shop | (1965-1968) | 11n, 11o | | |
| RAD-062 | 2842 | 3 | Unknown | Manufacturing | (1972-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-063 | 2842 | 6 | United Crescent Dry Cleaning Corp. | Dry Cleaners | (1929-1968) | 11l, 11m, 11n, 11o, 11an | Long duration, ~450' upgradient, potential for impacts | Solvents |
| RAD-063 | 2842 | 10 | United Crescent Dry Cleaning Corp. | Dry Cleaners | (1951-1968) | 11m, 11n, 11o | Moderate duration, ~400' upgradient, potential for impacts | Solvents |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-063 | 2842 | 12 | United Crescent Dry Cleaning Corp. | Dry Cleaners | (1933-1968) | 11l, 11m, 11n, 11o | Long duration, ~350' upgradient, potential for impacts | Solvents |
| RAD-063 | 2842 | 15 | United Crescent Dry Cleaning Corp. | Dry Cleaners/Rug Cleaning | (1951-2007) | 11m, 11n, 11o, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~350' upgradient, potential for impacts | Solvents |
| RAD-063 | 2842 | 30 | United Crescent Dry Cleaning Corp. | Dry Cleaners/ Rug Cleaning | (1951-2007) | 11m, 11n, 11o, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~200' upgradient, potential for impacts | Solvents |
| RAD-063 | 2842 | 36 | United Crescent Dry Cleaning Corp. | Dry Cleaners/ Rug Cleaning | (1951-2007) | 11m, 11n, 11o, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~350' upgradient, potential for impacts | Solvents |
| RAD-063 | 2842 | 38 | United Crescent Dry Cleaning Corp. | Dry Cleaners | (1951-1968) | 11m, 11n, 11o | Long duration, ~400' upgradient, potential for impacts | Solvents |
| RAD-064 | 2842 | 15 | Unknown | Pickling Works | (1933) | 11l | | |
| RAD-065 | 2842 | 16 | Unknown | Metal Product mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~250' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-065 | 2842 | 18 | Unknown | Metal Product mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~250' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-066 | 2842 | 19 | Gentleman Sheet Metal Inc | Metal Product mfg | (1965-2014) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at, 11au | Long duration, ~250' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-067 | 2843 | 1 | Unknown | Gas Tank | (1933) | 11l | Short duration, ~100' away, potential for impacts | Petroleum |
| RAD-068 | 2843 | 1 | Unknown | Lumber Yard | (1933) | 11l | Short duration, ~100' away, potential for impacts | Creosote |
| RAD-069 | 2843 | 1 | Unknown | Drum Storage | (1951-2014) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at | | |
| RAD-070 | 2843 | 23 | Unknown | Motor Freight Station | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-071 | 2851 | 1 | Unknown | Factory | (1904) | 11f, 11al | | |
| RAD-072 | 2851 | 1 | The Richard Young Co. Inc. | Tannery | (1929-1933) | 11l, 11an | Short duration, ~400' upgradient, potential for impacts | Mercury biocides, fungicides, tannins |
| RAD-072 | 2851 | 10 | The Richmond Young Co. Inc. | Tannery | (1933) | 11l | Short duration, ~400' upgradient, potential for impacts | Mercury biocides, fungicides, tannins |
| RAD-072 | 2851 | 60 | The Richmond Young Co. Inc. | Tannery | (1933) | 11l | Short duration, ~400' upgradient, potential for impacts | Mercury biocides, fungicides, tannins |
| RAD-072 | 2851 | 70 | The Richmond Young Co. Inc. | Tannery | (1933) | 11l | Short duration, ~400' upgradient, potential for impacts | Mercury biocides, fungicides, tannins |
| RAD-073 | 2851 | 1 | Banner Yarn Dyeing Corp. | Yarn Dyeing | (1951-1977) | 11m, 11n, 11o, 11p, 11ap | Long duration, ~400' upgradient, potential for impacts | Solvents, dyes |
| RAD-073 | 2851 | 10 | Banner Yarn Dyeing Corp. | Yarn Dyeing | (1951-1977) | 11m, 11n, 11o, 11p, 11ap | Long duration, ~400' upgradient, potential for impacts | Solvents, dyes |
| RAD-073 | 2851 | 60 | Banner Yarn Dyeing Corp. | Yarn Dyeing | (1951-1977) | 11m, 11n, 11o, 11p, 11ap | Long duration, ~400' upgradient, potential for impacts | Solvents, dyes |
| RAD-073 | 2851 | 70 | Banner Yarn Dyeing Corp. | Yarn Dyeing | (1951-1977) | 11m, 11n, 11o, 11p, 11ap | Long duration, ~400' upgradient, potential for impacts | Solvents, dyes |
| RAD-074 | 2851 | 1 | Famos Envelope Co. | Unknown | (1979-1988) | 11q, 11r, 11s, 11t, 11u, 11v, 11w | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-074 | 2851 | 10 | Famos Envelope Co. | Unknown | (1979-1988) | 11q, 11r, 11s, 11t, 11u, 11v, 11w | | |
| RAD-074 | 2851 | 60 | Famos Envelope Co. | Unknown | (1979-1988) | 11q, 11r, 11s, 11t, 11u, 11v, 11w | | |
| RAD-074 | 2851 | 70 | Famos Envelope Co. | Unknown | (1979-1988) | 11q, 11r, 11s, 11t, 11u, 11v, 11w | | |
| RAD-075 | 2851 | 1 | Unknown | Printing & Die Cutting | (1989-2007) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Moderate duration, ~400' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-075 | 2851 | 10 | Unknown | Printing & Die Cutting | (1989-2013) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11at | Moderate duration, ~400' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-075 | 2851 | 60 | Unknown | Printing & Die Cutting | (1989-2007) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Moderate duration, ~400' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-075 | 2851 | 70 | Unknown | Printing & Die Cutting | (1989-2007) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Moderate duration, ~400' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-076 | 2851 | 15 | Unknown | Filling Station | (1951-1968) | 11m, 11n, 11o | Moderate duration, ~100' upgradient, potential for impacts | Petroleum |
| RAD-077 | 2851 | 15 | Unknown | Drum Storage | (1965-2014) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at | | |
| RAD-078 | 2860 | 1 | Long Island Mattress Co./ Western Metal Bed Co. | Mattress & Metal Bed mfg | (1929-1972) | 11l, 11m, 11n, 11o, 11an, 11ap | | |
| RAD-079 | 2860 | 25 | Unknown | Printing Plate mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~100' upgradient, potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-080 | 2860 | 25 | Unknown | Manufacturing | (1977-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~100' upgradient, potential for impacts | Petroleum, oils, unknown chemical use |
| RAD-081 | 2869 | 1 | Unknown | Abandoned Bldg./ LTANK | (2002) | 11as | | |
| RAD-082 | 2869 | 1 | Morgan Plumbing & Steam Supply Co. | Unknown | (1929) | 11an | | |
| RAD-083 | 2869 | 1 | Unknown | Junk Yard, Gas Tank | (1933) | 11l | Short duration, ~400' upgradient, potential for impacts | Petroleum |
| RAD-084 | 2869 | 1 | Unknown | Steel Storage, Gas Tank | (1951-2007) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~400' upgradient, potential for impacts | Petroleum, metals |
| RAD-085 | 2869 | 5 | Unknown | Garage, Gas Tank | (1933) | 11l | | |
| RAD-086 | 2869 | 5 | Unknown | Motor Freight Station, Gas Tank | (1951) | 11m | | |
| RAD-087 | 2869 | 5 | Unknown | Metal Welding, Gas Tank | (1965-1987) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11ap | | |
| RAD-088 | 2869 | 11 | Brooklyn Paper Stock Corp. | Unknown | (1929) | 11an | | |
| RAD-089 | 2869 | 11 | Unknown | Textile Printing | (1951) | 11m | | |
| RAD-090 | 2869 | 26 | Excellent Store Fixtures Co. | Unknown | (1929) | 11an | | |
| RAD-090 | 2869 | 28 | Excellent Store Fixtures Co. | Unknown | (1929) | 11an | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-091 | 2869 | 26 | Unknown | Rubber Fabric Backing | (1951) | 11m | | |
| RAD-092 | 2869 | 26 | Atlas Fibers Co. Inc. | Fiber Processing & Storage | (1965-1968) | 11n, 11o | | |
| RAD-093 | 2869 | 26 | Unknown | Manufacturing | (1979-2007) | 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~100' upgradient, potential for impacts | Petroleum, oils, unknown chemical use |
| RAD-094 | 2869 | 28 | Unknown | Wood Cabinet mfg | (1933-2007) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~100' upgradient, potential for impacts | Paints, stains, oils |
| RAD-095 | 2869 | 31 | Keystone Alloys Co. Inc. | Unknown | (1929) | 11an | | |
| RAD-096 | 2869 | 31 | Unknown | Garage, Gas Tank | (1951-2007) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~200' upgradient, potential for impacts | Petroleum |
| RAD-097 | 2869 | 31 | Unknown | Machine Shop | (1972-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, PCBs |
| RAD-098 | 2878 | 1 | Bendit-Drey Co. Inc. | Mirrors & Glass mfg | (1929) | 11an | | |
| RAD-099 | 2878 | 1 | Arrow Bottle & Cap Corp. | Unknown | (1933) | 11l | | |
| RAD-100 | 2878 | 1 | American Steel Buck Corp. | Steel Door & Buck mfg | (1951) | 11m | | |
| RAD-101 | 2878 | 1 | Unknown | Furniture mfg | (1972-1977) | 11p, 11ap | | |
| RAD-102 | 2878 | 1 | Unknown | Furniture Mfg / Manufacturing | (1977-2007) | 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-103 | 2878 | 6 | Criterion Chemical Co. | Chemical Works, Metal & Wood Working | (1933) | 11l | Short duration, ~300' upgradient, low potential for impacts | Petroleum, oils, metals, unknown chemical use |
| RAD-104 | 2878 | 6 | Wholesale Chemicals & Fur Dyes | Wholesale Chemicals & Fur Dyes | (1951-1987) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11ap | Long duration, ~300-500' upgradient, low potential for impacts | Petroleum, solvents, dyes |
| RAD-105 | 2878 | 6 | Jos. H Lowenstein & Sons, Inc | Manufacturing/ LQG/ LTANK/ TRIS/ Spills | (1997) | 11as | Approximately 200' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-105 | 2878 | 16 | Jos. H Lowenstein & Sons, Inc | Paint & Varnish mfg | (1979-2014) | 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at, 11au | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-105 | 2878 | 18 | Jos. H Lowenstein & Sons, Inc | Drum Storage | (1987-2014) | 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11at, 11au | Long duration, ~100' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-105 | 2878 | 24 | Jos. H Lowenstein & Sons, Inc | Paint Storage, Woodworking | (1980-2014) | 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11at, 11au | Long duration, ~100' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-105 | 2878 | 29 | Jos. H Lowenstein & Sons, Inc | Paint mfg | (1979-2014) | 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap, 11at, 11au | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-106 | 2878 | 16 | Unknown | Paint & Varnish mfg | (1933) | 11l | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, dyes, metals |
| RAD-107 | 2878 | 16 | Purity Paint | Paint Warehouse | (1951-1980) | 11m, 11n, 11o, 11p, 11q, 11r, 11au | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, dyes |
| RAD-107 | 2878 | 18 | Purity Paint | Paint Storage | (1965-1990) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11au | Long duration, ~100' upgradient, potential for impacts | Petroleum, solvents, dyes |
| RAD-107 | 2878 | 29 | Purity Paint | Paint mfg | (1951-1979) | 11m, 11n, 11o, 11p, 11q, 11au | Long duration, ~200' upgradient, potential for impacts | Petroleum, solvents, dyes |
| RAD-108 | 2878 | 18 | Unknown | Plastic Molding | (1951) | 11m | | |
| RAD-109 | 2878 | 18 | Unknown | Bronze Molding | (1951-1990) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y | Long duration, ~100' upgradient, potential for impacts | Metals |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-110 | 2878 | 24 | J.H. Hemmerdinger & Son | Factory | (1921-1929) | 11am, 11an | | |
| RAD-111 | 2887 | 1 | Unknown | Iron Works, Iron & Steel Yard, Gas Tank | (1951-1982) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | Long duration, ~400' upgradient, potential for impacts | Metals, petroleum, oil |
| RAD-112 | 2887 | 1 | Unknown | Lumber Yard | (1977-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |
| RAD-113 | 2896 | 1 | Dept. of Sewers | Sewage Pumping Station | (1921-1968) | 11l, 11m, 11n, 11o, 11am, 11an | Moderate chemical-oil use, moderate potential for release, long duration, upgradient | PPCPs |
| RAD-114 | 2896 | 16 | Greenpoint Iron & Pipe Co. | Unknown | (1929) | 11an | | |
| RAD-115 | 2896 | 16 | Dept. of Highways | Bureau of Highways Yard/ Grit Chamber/ Pipe Cutting & Storage | (1929-2007) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11an, 11ap | Moderate chemical-oil use, moderate potential for release, long duration | Petroleum, solvents |
| RAD-115 | 2896 | 22 | Dept. of Highways | Pipe Cutting & Storage/ Pipe Yard | (1929-2007) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11an, 11ap | | |
| RAD-116 | 2909 | 1 | The Lawrence Rope Works | Rope Works, Tar House | (1886-1888) | 11c, 11d, 11j | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum, tar |
| RAD-116 | 2909 | 8 | The Lawrence Rope Works | Rope Works, Tar House | (1886-1888) | 11c, 11d, 11j | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum, solvents, dyes, tar |
| RAD-116 | 2909 | 15 | The Lawrence Rope Works | Rope Works | (1886-1893) | 11a, 11ak | | |
| RAD-116 | 2909 | 30 | The Lawrence Cortage Works | Rope Works | (1893) | 11ak | | |
| RAD-117 | 2909 | 1 | Standard Rope & Twine Co. | Rope Works | (1899-1916) | 11e, 11f, 11g, 11h, 11i, 11k, 11al | | |
| RAD-117 | 2909 | 8 | Standard Rope & Twine Co. | Rope Works | (1907) | 11g, 11k | | |
| RAD-117 | 2909 | 15 | Standard Rope & Twine Co. | Rope Works | (1907) | 11g, 11k | | |
| RAD-117 | 2909 | 30 | Standard Rope & Twine Co. | Rope Works | (1899-1907) | 11e, 11f, 11g, 11h, 11i, 11k, 11al | | |
| RAD-118 | 2909 | 1 | Banner Silk Dying Co. | Silk Dyeing | (1929) | 11an | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum, solvents, dyes |
| RAD-119 | 2909 | 1 | The Lignum Chemical Works | Chemical Works | (1933) | 11l | High chemical-oil use, high potential for release, large footprint | Petroleum, solvents, unknown chemical use |
| RAD-119 | 2909 | 8 | The Lignum Chemical Works | Chemical Works | (1933) | 11l | High chemical-oil use, high potential for release, large footprint | Petroleum, solvents, unknown chemical use |
| RAD-119 | 2909 | 15 | The Lignum Chemical Works | Chemical Works | (1933) | 11l | High chemical-oil use, high potential for release, large footprint | Petroleum, solvents, unknown chemical use |
| RAD-119 | 2909 | 30 | The Lignum Chemical Works | Chemical Works | (1933) | 11l | High chemical-oil use, high potential for release, large footprint | Petroleum, solvents, unknown chemical use |
| RAD-120 | 2909 | 1 | Unknown | Sheet Metal Works, Painting & Manufacturing | (1965-1968) | 11n, 11o | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum, solvents, dyes, metals |
| RAD-121 | 2909 | 8 | Unknown | Manufacturing | (1965-1994) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ap | Moderate chemical-oil use, moderate potential for release, long duration, upgradient, across Vandervoort Ave. | Petroleum, oils, unknown chemical use |
| RAD-122 | 2909 | 15 | Commercial Smelting & Refining | Manufacturing | (2005) | 11as | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum, oils, unknown chemical use |
| RAD-123 | 2909 | 15 | Unknown | Metal Scrapping | (1951-1994) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ap | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-124 | 2909 | 15 | Brooklyn Truck Wash | Truck Repair & Wash | (2001-2014) | 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11at | Moderate chemical-oil use, moderate potential for release, upgradient, across Vandervoort Ave. | Petroleum |
| RAD-125 | 2909 | 30 | Unknown | Manufacturing | (2001-2007) | 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | | |
| RAD-126 | 2909 | 101 | Unknown | Fur Dyeing | (1933) | 11l | | |
| RAD-127 | 2909 | 101 | Globe Products Co. | Jellies mfg | (1951) | 11m | | |
| RAD-128 | 2909 | 101 | Atlantic Foam Products Corp. | Foam Products mfg | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-129 | 2909 | 106 | Oxford Filing Supply Co. | Filing Supplies | (1933) | 11l | | |
| RAD-130 | 2909 | 106 | Royal Yarn Dyeing Corp. | Yarn Dying, Manufacturing | (1951-1994) | 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ap | Moderate chemical-oil use, moderate potential for release, long duration, upgradient, across Vandervoort Ave. | Petroleum, solvents, dyes, PCBs |
| RAD-131 | 2909 | 106 | Vander Dyeing & Finishing Corp. | Manufacturing | (2005) | 11as | | |
| RAD-132 | 2927 | 42 | Joseph A Solan | Saw and Planing Mill | (1907) | 07e | | |
| RAD-133 | 2927 | 42 | Newtown Creek Development Corp. / Salwen Paper Co. Inc. | Manufacturing | (1965-2003) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ap | | |
| RAD-134 | 2927 | 42 | Newtown Creek Development Corp. / Unknown | Manufacturing | (2004-2007) | 11ag, 11ah, 11ai, 11aj | | |
| RAD-135 | 2927 | 42 | Rockower-Sigawel Associates | Industrial/Manufacturing SQG/SPILL | (2005) | 11as | | |
| RAD-136 | 2927 | 44 | Unknown | Used Pipe & Valve Storage | (1965-1982) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | | |
| RAD-136 | 2927 | 54 | Unknown | Used Pipe & Valve Storage | (1965-1982) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | | |
| RAD-136 | 2927 | 57 | Unknown | Used Pipe & Valve Storage | (1965-1982) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | | |
| RAD-137 | 2927 | 44 | Cooper Tank Recycling Co. | Waste Recycling & Garbage & Waste Transfer Station, SWF/LF AST | (1989-2014) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ar, 11at | Large chemical and petroleum storage, across Maspeth Ave., high potential for release | Petroleum, solvents |
| RAD-137 | 2927 | 54 | Cooper Tank Recycling Co. | Waste Recycling & Garbage & Waste Transfer Station, SWF/LF AST | (1989-2014) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ar, 11at | Large chemical and petroleum storage, across Maspeth Ave., high potential for release | Petroleum, solvents |
| RAD-137 | 2927 | 57 | Cooper Tank Recycling Co. | Waste Recycling & Garbage & Waste Transfer Station, SWF/LF AST | (1989-2014) | 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ar, 11at | Large chemical and petroleum storage, across Maspeth Ave., high potential for release | Petroleum, solvents |
| RAD-138 | 2927 | 57 | Fontana Transfer Station | Industrial and Manufacturing (Factory/Industrial) (SWF/LF) | (2005) | 11as | Large chemical and petroleum storage, across Maspeth Ave., high potential for release | Petroleum, solvents |
| RAD-139 | 2927 | 90 | Newtown Creek Development Corp./ Sea Land Service Inc. | Truck Service, Motor Freight Station | (1965-1982) | 7l, 7m, 7n, 7o, 7p, 7q, 7r, 7an | | |
| RAD-140 | 2927 | 90 | Newtown Creek Development Corp./ J.B. Williams Express Inc. | Truck Service, Motor Freight Station | (1986-1987) | 7s, 7t | | |
| RAD-141 | 2927 | 90 | Newtown Creek Development Corp./ JC-Duggan Inc. | Truck Service | (1988-2014) | 7u, 7v, 7w, 7x, 7y, 7z, 7aa, 7ab, 7ac, 7ad, 7ae, 7af, 7ag, 7ah, 7aq | | |

**Table 2. Identified Potentially Responsible Parties - Parcels within Approximately 500 feet**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-142 | 2927 | 90 | ABF Freight Systems | Commercial/ UST | (1988-1991) | 11as | | |
| RAD-142 | 2928 | 20 | ABF Freight Systems | Commercial/ UST | (1969-1996) | 11as | | |
| RAD-143 | 2927 | 110 | Atlantic Basin Oil Co. | Oil Storage | (1933) | 11l | Moderate duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-144 | 2927 | 110 | Concord Oil Co. | Oil Storage | (1933) | 11l | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-144 | 2927 | 123 | Concord Oil Co. | Oil Storage | (1933) | 11l | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-145 | 2927 | 110 | Unknown | Auto Repair | (1933-2007) | 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj | Long duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-146 | 2927 | 110 | Morania Oil Co. | Oil Storage | (1951-1972) | 11m, 11n, 11o, 11ap | Moderate duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-147 | 2927 | 110 | Chevron Oil Co. | Oil Storage | (1966-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11au | Moderate duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-147 | 2927 | 123 | Chevron Oil Co. | Oil Storage | (1977) | 11p | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-148 | 2927 | 110 | Tanks-A-Lot | CERCLIS-NFRAP | (1980) | 11as | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-149 | 2927 | 110 | Calleia Brothers, Inc. | Oil/Petrochemical/ SQG | (1979-1986) | 11as, 11au | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum, PCBs, solvents |
| RAD-150 | 2927 | 110 | Gaseteria Oil Corp. | Oil/Petrochemical/Spills | (2005) | 11as | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-151 | 2927 | 110 | BCF Oil Refinery | Oil Refinery - Superfund & SPDES Site, CERCLIS, LQG, SHWS, MOSF, NYVCP, SWF/LF, Spills | (1986-2000) | 11aq, 11au | Moderate duration, ~200' cross gradient, potential for site impacts if a release | Petroleum, PCBs, coal tar |
| RAD-152 | 2927 | 123 | New York Recyclers, Inc., | SWF/LF | (2005) | 11as | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum, solvents |
| RAD-153 | 2927 | 123 | Valvoline Oil Co. | Oil Tanks & Oil Storage | (1904-1907) | 11f, 11g, 11al | Short duration, ~200' cross gradient, potential for site impacts if a release | Petroleum |
| RAD-154 | 2927 | 123 | Gulf Oil Refining Co. | Oil Refinery & Storage | (1904-2006) | 11h, 11l, 11m, 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11am, 11al, 11ap | Long duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-154 | 2928 | 1 | Gulf Oil Refining Co. | Oil Refinery & Storage | (1972-2007) | 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11ap | Long duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-155 | 2927 | 123 | Marshal Impound Yard | Impound Yard | (2007-2014) | 11aj, 11at | | |
| RAD-156 | 2927 | 125 | Newtown Creek Development Corp. / Lack Carpet Co. Inc. | Unknown | (1965-1982) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11ap | | |
| RAD-157 | 2927 | 125 | Newtown Creek Development Corp./Boro Recycling | Recycling | (1986-1990) | 11u, 11v, 11w, 11x, 11y | | |
| RAD-158 | 2927 | 125 | Newtown Creek Development Corp./ Global Moving & Storage | Industrial/Manufacturing (Shipping Warehouse) (UST) | (1991-2007) | 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11as | | |
| RAD-159 | 2927 | 150 | The Chapman Docks Co./ Knapp Coal Yard | Coal Yard | (1933) | 7j | | |
| RAD-159 | 2927 | 168 | The Chapman Docks Co./ Knapp Coal Yard | Coal Yard | (1929-1933) | 7j, 7al | Moderate chemical-oil use, potential for co-mingled plume | Petroleum, coal |

| PRP Site Code | Block | Lot | Company Name | Facility Operations | Known Years of Operation | Reference Source ID | Rationale | Potential Contaminants of Concern |
|---|---|---|---|---|---|---|---|---|
| RAD-160 | 2927 | 150 | The Chapman Docks Co./ A.G. Feldman | Coal Yard | (1951) | 7k | | |
| RAD-160 | 2927 | 168 | The Chapman Docks Co./ A.G. Feldman | Coal Yard | (1951) | 7k | Moderate chemical-oil use, potential for co-mingled plume | Petroleum, coal |
| RAD-161 | 2927 | 150 | Newtown Creek Development Corp./ Purofied Down Products Corp. | Unknown | (1965-1982) | 7l, 7m, 7n, 7o, 7p, 7q, 7r | | |
| RAD-162 | 2927 | 150 | Newtown Creek Development Corp./ Manhattan Door Corp. | Unknown | (1986-2007) | 7s, 7t, 7u, 7v, 7w, 7x, 7y, 7z, 7aa, 7ab, 7ac, 7ad, 7ae, 7af, 7ag, 7ah | | |
| RAD-163 | 2927 | 168 | The Chapman Docks Co./ Marvel Oil Corp. | Unknown | (1929) | 11an | Moderate chemical-oil use, downgradient of site, potential for co-mingled plume to Newtown Creek | Petroleum |
| RAD-164 | 2927 | 168 | The Chapman Docks Co./ Central Valley Coal Co. | Coal Yard | (1929) | 7al | Moderate chemical-oil use, potential for co-mingled plume | Petroleum, coal |
| RAD-165 | 2927 | 168 | The Chapman Docks Co./ The Hobin Hunter Feitner Lumber Co. | Lumber Yard | (1929-1951) | 11m, 11an | Moderate chemical-oil use, potential for co-mingled plume | Creosote |
| RAD-166 | 2927 | 168 | The Chapman Docks Co./ E.V. Crandall Oil & Putty Mfg Co. | Oil & Putty mfg | (1929-1951) | 11l, 11m, 11an | Moderate chemical-oil use, long duration, downgradient of site, potential for co-mingled plume to Newtown Creek | Petroleum, solvents |
| RAD-167 | 2927 | 168 | The Chapman Docks Co./ Unknown | Lumber Yard | (1951) | 7k | | |
| RAD-168 | 2927 | 168 | The Chapman Docks Co./ Unknown | Fuel Oil Tanks & Truck Filling | (1951) | 11m | Moderate chemical-oil use, downgradient of site, potential for co-mingled plume to Newtown Creek | Petroleum |
| RAD-169 | 2927 | 168 | Newtown Creek Development Corp./ Branch Motor Express Inc. | Truck Service, Motor Freight Station | (1965-1990) | 7l, 7m, 7n, 7o, 7p, 7q, 7r, 7s, 7t, 7u, 7v, 7w, 7an | | |
| RAD-170 | 2927 | 168 | Newtown Creek Development Corp./ Roadway Package System Co. | Truck Service, Motor Freight Station | (1991-1994) | 7x, 7y, 7z, 7aa, | | |
| RAD-171 | 2927 | 168 | Newtown Creek Development Corp./ FedEx | Truck Service, Motor Freight Station | (2001-2015) | 7ab, 7ac, 7ad, 7ae, 7af, 7ag, 7ah, 7aq | | |
| RAD-172 | 2928 | 1 | Unknown | Garage & Repair | (1933-1968) | 11l, 11m, 11n, 11o | Long duration, ~300' cross gradient, potential for impacts | Petroleum |
| RAD-173 | 2928 | 1 | Unknown | Oil Storage, Fuel Oil & Kerosene Tanks | (1951-1968) | 11m, 11n, 11o | Moderate duration, ~200' cross gradient, potential for impacts | Petroleum |
| RAD-174 | 2928 | 1 | Ditmas Terminal | Toxic Release Inventory Reporting Facility, Oil/ Petrochemical/ Truck Terminal/MOSF, TRIS, SQG, CBS AST | (1965-2001) | 11aq | Long duration, ~300' cross gradient, potential for impacts | Petroleum, oils |
| RAD-175 | 2928 | 20 | Louis Bossert & Son | Lumber Yard | (1907) | 11g, 11k | Short duration, ~300' cross gradient, potential for impacts | Creosote |
| RAD-175 | 2928 | 30 | Louis Bossert & Son | Lumber Yard | (1907) | 11g, 11k | Short duration, ~300' cross gradient, potential for impacts | Creosote |
| RAD-176 | 2928 | 20 | United Fuel Corp. | Coal Yard | (1933-1951) | 11l, 11m | Moderate duration, ~200' cross gradient, potential for impacts | Coal, petroleum |
| RAD-176 | 2928 | 30 | United Fuel Corp. | Coal Yard | (1933-1951) | 11l, 11m | Moderate duration, ~200' cross gradient, potential for impacts | Coal, petroleum |
| RAD-177 | 2928 | 20 | Carolina Freight Carriers | Unknown | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | Long duration, ~200-500' cross gradient, low potential for impacts | |
| RAD-178 | 2928 | 30 | Quinn Trucking Co. | Trucking | (1965-2007) | 11n, 11o, 11p, 11q, 11r, 11s, 11t, 11u, 11v, 11w, 11x, 11y, 11z, 11aa, 11ab, 11ac, 11ad, 11ae, 11af, 11ag, 11ah, 11ai, 11aj, 11ap | | |
| RAD-179 | 2928 | 30 | Empire Transit Mix Inc. | Bulk Storage | (1994-2014) | 11aq, 11at | | |
| RAD-180 | Maspeth and Morgan | NA | Unknown | Transformer | Unknown | 11av | | |

**Note:**
PRP=Potentially Responsible Parties

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-GT01 (MW)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-GT02 (CPT)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT03 (MW)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-GT04S/D (MW)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-GT05 (MW)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-GT06 (CPT)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT07 (MW)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-GT08** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-GT09 (CPT)** | **Area 1** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT10S/D (MW)** | **Area 1** | **PDI** | Along Maspeth Avenue and the Bulkhead area | Soil boring to evaluate the subsurface soil conditions. Monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-GT11 (CPT)** | **Area 1** | **PDI** | Along Maspeth Avenue and the Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-GT12** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT13 (CPT)** | **Area 1** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT14** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT15 (CPT)** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT16** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT17 (CPT)** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT18** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT19 (CPT)** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT20** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT21 (CPT)** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT22** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-GT23 (CPT)** | **Area 1** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT24 (CPT)** | **Area 4** | **PDI** | East of Varick Avenue and West of the Facilities Building | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-GT25 (CPT)** | **Area 7** | **PDI** | East of Varick Avenue and West of the Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions and perform CPT. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-GT26 (CPT)** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions and perform CPT. |
| **GPEC-SB01/SB01B/MW01R** | **Area 1** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to potentially recover DNAPL. |
| **GPEC-SB02/MW-2** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB03/MW-3D** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB03S/MW-3S** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB04/04B** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB04C/MW-4** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB05S/MW-5S** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB05C/MW-5D** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB06/MW-6** | **Area 7** | **PDI** | North of Stores Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB07/MW-7D** | **Area 7** | **PDI** | North of Stores Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB08/MW-8** | **Area 8** | **PDI** | Southwest of LNG Tank 1 | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB09/MW-9** | **Area 8** | **PDI** | Between LNG Tanks 1 and 2 | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB10/MW-10** | **Area 7** | **PDI** | West of Service Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB11/MW-11** | **Area 7** | **PDI** | South of LNG Area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB12/MW-12** | **Area 7** | **PDI** | Between S&S Building and Welding Shop | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB13/MW-13** | **Area 8** | **PDI** | LNG Area near intersection of Varick Avenue and Lombardy Street | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB101A/MW-101D** | **Area 4** | **PDI** | Between Transportation Building and Stores Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB102/MW-102D** | **Area 4** | **PDI** | South of Transportation Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB103/103A/MW-103** | **Area 1** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB104** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB105/MW-2D** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB106/MW-3WT** | **Area 2** | **PDI** | Bulkhead area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB107/MW-11D** | **Area 7** | **PDI** | South of LNG Area | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB108/MW-101I** | **Area 4** | **PDI** | Between Transportation Building and Stores Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB109/MW-101WT** | **Area 4** | **PDI** | Between Transportation Building and Stores Building | Soil boring to evaluate subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB110** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB111** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-SB112** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-SB113** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-SB114** | **Newtown Creek** | **PDI** | Along the Bulkhead in Newtown Creek | Boring to evaluate sediment conditions. |
| **GPEC-SED01** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED02** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED03** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED04** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED05** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED06** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED07** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED08** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED09** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SED10** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED11** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED12** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED13** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED14** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED15** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED16** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED17** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED18** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED19** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED20** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED21** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED22** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED23** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SED24** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED25** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED26** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED27** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED28** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED29** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED30** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SED31** | **Newtown Creek** | **PDI** | Newtown Creek Turning Basin | Sediment core to evaluate sediment conditions. |
| **GPEC-SIS-1** | **Area 7** | **PDI** | Between Stores Building and Service Building | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SIS-2 (PZ)** | **Area 7** | **PDI** | Between Stores Building and Service Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-SIS-3 (PZ)** | **Area 7** | **PDI** | Between Stores Building and Service Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-SIS-4 (PZ)** | **Area 7** | **PDI** | North of Stores Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-SIS-5 (PZ)** | **Area 7** | **PDI** | North of Stores Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SIS-6 (PZ)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-SIS-7 (PZ)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-SIS-8 (PZ)** | **Area 4** | **PDI** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions. Piezometer installed for stormwater evaluation study. |
| **GPEC-TP01** | **Area 2** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP02** | **Area 2** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP03** | **Area 1** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP04** | **Area 1** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP05** | **Area 1** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP06** | **Area 1** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP07** | **Area 2** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP08** | **Area 2** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-TP09** | **Area 2** | **PDI** | Bulkhead area | Test pit to confirm the geometry of the existing wall and other potentially significant features. |
| **GPEC-MR01** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR02** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-MR03** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR04** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR05** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR06** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR07** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR08** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR09** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR10** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR11** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR12** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-MR13** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to pre-characterize soil for disposal. |
| **GPEC-SB115** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB116** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB117** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB118** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB119** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB120** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB121** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB122** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate subsurface soil conditions. |
| **GPEC-SB201/MW201** | **Area 3** | **Phase 1** | Maspeth Regulator Station | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB202/MW202** | **Area 1** | **Phase 1** | East of Transportation Building | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB203** | **Area 1** | **Phase 1** | MW-1 area | Soil boring to evaluate potential DNAPL presence near monitoring well MW-1. |
| **GPEC-SB204** | **Area 1** | **Phase 1** | MW-1 area | Soil boring to evaluate potential DNAPL presence near monitoring well MW-1. |
| **GPEC-SB205/MW205** | **Area 1** | **Phase 1** | MW-1 area | Soil boring to evaluate potential DNAPL presence near monitoring well MW-1. Monitoring well installed to potentially recover DNAPL. |
| **GPEC-SB206** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB207** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB208** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB209** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB210** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB211** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB212** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB213** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB214** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB215** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB216** | **Area 2** | **Phase 1** | Bulkhead area | Soil boring to evaluate subsurface soil conditions along the bulkhead. |
| **GPEC-SB217 /GPEC-MW217S/I/D** | **Area 8** | **Phase 1** | Northeast part of the Site near LNG Plant, vicinity of former Lagoon | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |
| **GPEC-SB218 /GPEC-MW218I/D** | **Area 8** | **Phase 1** | Near former 400,000-gal Tar Tank, north of the Site, to the right of Varick Avenue | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |
| **GPEC-SB219 /GPEC-MW219S/I/D** | **Area 6** | **Phase 1** | South of the Tank Field, near coner of Division Pl and Porter Avenue | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |
| **GPEC-SB220 /GPEC-MW220S/I/D** | **Area 9** | **Phase 1** | Demolished Holder 2 area, near Vandervoort Avenue | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |
| **GPEC-SB221 /GPEC-MW221S/I/D** | **Area 7** | **Phase 1** | North of Storage Building, to the right of Varick Avenue | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB222 /GPEC-MW222S/D** | **Area 5** | **Phase 1** | Demolished Holder 1 area, near Maspeth Avenue | Soil boring to evaluate the subsurface soil conditions. Complete the cluster of monitoring wells evaluate groundwater conditions and flow. |
| **GPEC-TP201A/B/C** | **Area 2** | **Phase 1** | Bulkhead area | Test pit to determine location of underground utilities. |
| **GPEC-TP202A/B** | **Area 2** | **Phase 1** | Bulkhead area | Test pit to determine location of underground utilities. |
| **GPEC-TP203/TP203B** | **Area 2** | **Phase 1** | Bulkhead area | Test pit to determine location of underground utilities. |
| **GPEC-TP204** | **Area 2** | **Phase 1** | Bulkhead area | Test pit to determine location of underground utilities. |
| **GPEC-TP205** | **Area 2** | **Phase 1** | Bulkhead area | Test pit to determine location of underground utilities. |
| **GPEC-SB301** | **Area 4** | **Phase 2** | Along Maspeth Avenue, South of Transportation building | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Soil boring was cleared for utilities but not advanced. |
| **GPEC-SB302/PZ302** | **Area 4** | **Phase 2** | Along Maspeth Avenue, South of Transportation building | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB304/RW304** | **Area 5** | **Phase 2** | Nortwest of Holder 1 near former Pump House | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Several delineation borings (A through K and S) advanced in area and recovery well installed. |
| **GPEC-SB305/PZ305** | **Area 9** | **Phase 2** | Nortwest of Holder 1 near former Pump House | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB306/PZ306/MW306 I/D** | **Area 4** | **Phase 2** | Along Maspeth Avenue, South of Transportation building | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer and monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB307** | **Area 5** | **Phase 2** | Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB308/SB308A** | **Area 5** | **Phase 2** | Former Drip Pump House, Maspeth Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB309/PZ309** | **Area 4** | **Phase 2** | Central Western Portion of Area 4, near former SNG area | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer installed to determine shallow groundwater flow in the area. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB310** | **Area 4** | **Phase 2** | Along Maspeth Avenue, former SNG area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB311/PZ311** | **Area 4** | **Phase 2** | Central Portion of Area 4, Near former Washing Oil Cooling Coils, Service Vehicles Parking Lot | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB313** | **Area 5** | **Phase 2** | Southwestern portion of Area 5 on former ballfield near location of former Varnish company and USTs. | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB314/PZ314** | **Area 4** | **Phase 2** | Near former Hydrogen Unit and By-Product Building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB315** | **Area 4** | **Phase 2** | Former wash oil structures, Employee Parking Lot | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB316/PZ316** | **Area 4** | **Phase 2** | Along Maspeth Avenue | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB317** | **Area 4** | **Phase 2** | Along Maspeth Avenue in Employee Parking Lot | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. |
| **GPEC-SB318** | **Area 5** | **Phase 2** | Former Holder utilities, Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB319** | **Area 4** | **Phase 2** | Along Maspeth Avenue | Soil boring to evaluate subsurface soil conditions along Masprth Avenue. |
| **GPEC-SB320/PZ320** | **Area 4** | **Phase 2** | Northwestern portion of Area 4, near former SNG area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB321** | **Area 4** | **Phase 2** | Near former Liquor Tank, North of Transportation Building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB322/PZ322** | **Area 4** | **Phase 2** | Northeastern part of Area 4, South of Service Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB323/PZ323** | **Area 4** | **Phase 2** | Northeastern part of Area 4, between Service Building and Stores Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed to determine shallow groundwater flow in the area. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB324** | **Area 4** | **Phase 2** | Near former Coke Oven Tar Tank, north of Transportation building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB325/PZ325** | **Area 4** | **Phase 2** | Central and western portion of Area 4, near Facilities Building | Soil boring to evaluate subsurface soil conditions. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB326** | **Area 5** | **Phase 2** | Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB328/PZ328/MW328 I/D** | **Area 4** | **Phase 2** | Along Maspeth Avenue | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Piezometer and monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB329/PZ329** | **Area 7** | **Phase 2** | Northwestern portion of Area 4, near former SNG area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB330/PZ330** | **Area 5** | **Phase 2** | Former Settling Tank, Near Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB331** | **Area 5** | **Phase 2** | Former Settling Tank, Tar Conditioner, Near Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB332/PZ332/RW332** | **Area 5** | **Phase 2** | Former Drip Pump House, near Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. Recovery well installed |
| **GPEC-SB333/PZ333/MW333 I/D** | **Area 5** | **Phase 2** | Along Maspeth Avenue | Soil boring to a evaluate subsurface soil conditions along Maspeth Avenue. Piezometer and monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB334** | **Area 5** | **Phase 2** | Along Maspeth Avenue in the vicinity of impacts identified in Equity RI borings | Soil boring to a evaluate subsurface soil conditions along Maspeth Avenue and to investigate nearby impacts. |
| **GPEC-SB336** | **Area 5** | **Phase 2** | Southwestern portion of Area 5 on former ballfield near location of former Varnish company and USTs. | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB339/MW339 S/I/D** | **Area 5** | **Phase 2** | Southwest side of Holder 2 | Soil boring to a evaluate subsurface soil conditions soil conditions near potential source of contamination. Monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB340/PZ340** | **Area 5** | **Phase 2** | Southwestern portion of Area 5 on former ballfield near location of former Varnish company and USTs. | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB341** | **Area 5** | **Phase 2** | Former Waste Area, east of Vandervoort Avenue | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB342/PZ342** | **Area 5** | **Phase 2** | Former Settling Tank, Near Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB343/PZ343** | **Area 5** | **Phase 2** | Near Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB344/MW344 S/I/D** | **Area 5** | **Phase 2** | Near Vandervoort Ave and Maspeth Ave, Softball Field | Soil boring to a evaluate subsurface soil conditions near potential source of contamination. Monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB345** | **Area 4** | **Phase 2** | Along Maspeth Avenue | Soil boring to a evaluate subsurface soil conditions along Maspeth Ave. Soil boring was cleared for utilities but not advanced. |
| **GPEC-SB346/PZ346** | **Area 4** | **Phase 2** | North of Transformer Pad, Service Vehicles Parking Lot | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Piezometer installed to determine shallow groundwater flow in the area. |
| **GPEC-SB347** | **Area 5** | **Phase 2** | Former Ballfield Area | Soil boring to a evaluate subsurface soil conditions and to investigate nearby impacts. |
| **GPEC-SB348** | **Area 5** | **Phase 2** | Northwest of Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB349** | **Area 5** | **Phase 2** | Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB350** | **Area 5** | **Phase 2** | Holder 2 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB351** | **Area 5** | **Phase 2** | Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB352** | **Area 5** | **Phase 2** | Holder 1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-TP300** | **Area 4** | **Phase 2** | Near Naphthalene Separator, south of Transportation building | Test pit to determine location of former MGP structures. |
| **GPEC-TP301** | **Area 4** | **Phase 2** | Near former Coke Oven Tar Tank, north of Transportation building | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP302** | **Area 4** | **Phase 2** | Former Ammonia Liquor Storage Tank, north of Transportation building | Test pit to determine location of former MGP structures. |
| **GPEC-TP303** | **Area 4** | **Phase 2** | Near Flushing Liquor Decanting Tank, north of Transportation building | Test pit to determine location of former MGP structures. |
| **GPEC-TP304** | **Area 4** | **Phase 2** | Near Flushing Liquor Decanting Tank, north of Transportation building | Test pit to determine location of former MGP structures. |
| **GPEC-TP305** | **Area 4** | **Phase 2** | Near Flushing Liquor Decanting Tank, north of Transportation building | Test pit to determine location of former MGP structures. |
| **GPEC-TP306** | **Area 4** | **Phase 2** | Underground Utilities, Employee Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP307** | **Area 4** | **Phase 2** | Former wash oil structures, Employee Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP308** | **Area 4** | **Phase 2** | Former Gas Washer, Employee Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP309** | **Area 4** | **Phase 2** | Former Wash Oil Circulator Tank, Employee Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP310** | **Area 4** | **Phase 2** | Former Wash Oil Storage Tank, Service Vehicles Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP311** | **Area 4** | **Phase 2** | North of Transformer Pad, Service Vehicles Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP312** | **Area 4** | **Phase 2** | Former Washing Oil Cooling Coils, Service Vehicles Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP313** | **Area 4** | **Phase 2** | Former drain feature channel, North of Maspeth Ave | Test pit to determine location of former drain channel. |
| **GPEC-TP314** | **Area 4** | **Phase 2** | Former Naphthalene Scrubber, Service Vehicles Parking Lot | Test pit to determine location of former MGP structures. |
| **GPEC-TP316** | **Area 4** | **Phase 2** | Former Waste Area, North of Maspeth Ave | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP317** | **Area 4** | **Phase 2** | Former Waste/SNG Area, North of Maspeth Ave | Test pit to determine location of former MGP structures. |
| **GPEC-TP318** | **Area 5** | **Phase 2** | Former Settling Tank, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP318EX** | **Area 5** | **Phase 2** | Former Oil House, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP319** | **Area 5** | **Phase 2** | Former Drip Pump House, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP320** | **Area 5** | **Phase 2** | Former Holder utilities, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP321** | **Area 5** | **Phase 2** | Former Pump House, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP322** | **Area 5** | **Phase 2** | Former Settling Tank, Tar Conditioner, Holder 1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP323** | **Area 5** | **Phase 2** | Former Waste Area, East of Vandervoort Avenue | Test pit to determine location of former MGP features. |
| **GPEC-TP324** | **Area 5** | **Phase 2** | Former Settling Tank, Holder 2 | Test pit to determine location of former MGP structures. |
| **GPEC-TP325** | **Area 5** | **Phase 2** | Former Holder utilities, Holder 2 | Test pit to determine location of former MGP structures. |
| **GPEC-TP325 EX** | **Area 5** | **Phase 2** | Former Holder utilities, Holder 2 | Test pit to determine location of former MGP structures. |
| **GPEC-TP326** | **Area 5** | **Phase 2** | Former Settling Tank, Holder 2 | Test pit to determine location of former MGP structures. |
| **GPEC-TPUST1** | **Area 5** | **Phase 2** | Former UST Area | Test pit to determine location of former USTs not associated with the fomer MGP. |
| **GPEC-TPUST2** | **Area 5** | **Phase 2** | Former UST Area | Test pit to determine location of former USTs not associated with the fomer MGP. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB400** | **Area 7** | **Phase 3** | Former Drainage Feature | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB401** | **Area 7** | **Phase 3** | Near former Gasoline Pumps | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB402** | **Area 7** | **Phase 3** | Near former Gasoline Pumps | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB403** | **Area 7** | **Phase 3** | Near former Paint and Oil Storage Area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB404** | **Area 7** | **Phase 3** | Near Former Producer Gas Holder Area. | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB405** | **Area 7** | **Phase 3** | Near Former Producer Gas Holder Area. | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB406** | **Area 7** | **Phase 3** | Near Former Booster Building Area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB407** | **Area 7** | **Phase 3** | Former Separator Pit Near Booster Building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Soil boring was cleared for utilities but not advanced. |
| **GPEC-SB408** | **Area 7** | **Phase 3** | Near Surface Condenser | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB409** | **Area 7** | **Phase 3** | Former Gas Producing Building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB410** | **Area 7** | **Phase 3** | Decant Area | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB411** | **Area 7** | **Phase 3** | Former Gas Producing Building | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB412** | **Area 7** | **Phase 3** | Near former Boiler House | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB413** | **Area 7** | **Phase 3** | Former Coal & Coke Storage Area | Soil boring to investigate shallow impacts noted during recent excavation activity in area |
| **GPEC-SB501** | **Area 6** | **Phase 3** | South of 2 smaller Oil Tanks | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB502/MW502** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB503** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB504** | **Area 6** | **Phase 3** | Near Underground Oil Pump House | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB505/MW505 S/D** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. Monitoring wells installed to evaluate groundwater conditions and flow. |
| **GPEC-SB506** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB507** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB508** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB509** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB510** | **Area 6** | **Phase 3** | Near Oil Storage Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB511** | **Area 9** | **Phase 3** | South of former Purifiers | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB512** | **Area 9** | **Phase 3** | Area of former Purifiers | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB513/MW513 S/D** | **Area 9** | **Phase 3** | Baseball field near Vandervoort Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring wells installed to evaluate groundwater conditions and flow. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB514/MW514** | **Area 9** | **Phase 3** | Baseball field near Vandervoort Avenue | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB515** | **Area 9** | **Phase 3** | Area of former Purifiers | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB516** | **Area 8** | **Phase 3** | Near former High Pressure Holders | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB517** | **Area 8** | **Phase 3** | Former Spent Oil Tank | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB518** | **Area 8** | **Phase 3** | Former Scrubber | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB519** | **Area 8** | **Phase 3** | Near former Tar precipitators | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB520** | **Area 8** | **Phase 3** | Near former Relief Holder #1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB521** | **Area 8** | **Phase 3** | Former Salt Water Condensers | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB522** | **Area 8** | **Phase 3** | Near former Relief Holder #1 | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB523** | **Area 8** | **Phase 3** | Former Tar Separator | Soil boring to investigate impacts identified during the test pit program. |
| **GPEC-SB524** | **Area 8** | **Phase 3** | Former Generator House | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB525** | **Area 8** | **Phase 3** | Former Generator House | Soil boring to replace test pit in the area that was not advanced due to the presence of utilities. |
| **GPEC-SB526** | **Area 8** | **Phase 3** | Former Pump House | Soil boring to investigate impacts identified during the test pit program. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB527** | **Area 8** | **Phase 3** | Near former Concrete Pit | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB528** | **Area 8** | **Phase 3** | Former Boiler Fuel Storage Tank | Soil boring to replace test pit in the area that was not advanced due to the presence of utilities. |
| **GPEC-SB529** | **Area 8** | **Phase 3** | Near former Wet Tar Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB530** | **Area 8** | **Phase 3** | Near former Dry Tar Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB531** | **Area 8** | **Phase 3** | #1 Tar Pit | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB532** | **Area 8** | **Phase 3** | Waste Catalyst | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB533** | **Area 8** | **Phase 3** | South of Bunker C Oil Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB534** | **Area 8** | **Phase 3** | North of Residuum Oil Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB535** | **Area 8** | **Phase 3** | Near Residual Distillate Storage Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB536** | **Area 8** | **Phase 3** | South of Former Crude Solvent Tank | Soil boring to evaluate subsurface soil conditions near potential source of contamination. |
| **GPEC-SB537/MW537** | **Area 8** | **Phase 3** | Near Lombardy Street | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-SB538/MW538** | **Area 8** | **Phase 3** | Near Lombardy Street | Soil boring to evaluate the subsurface soil conditions. Monitoring well installed to evaluate groundwater conditions and flow. |
| **GPEC-TP400** | **Area 7** | **Phase 3** | Former Naphtha Feed Area, south of the Storage Building. | Test pit to determine location of former MGP structures. |
| **GPEC-TP401** | **Area 7** | **Phase 3** | Former Naphtha Feed Area, south of the Storage Building. | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP402** | **Area 7** | **Phase 3** | Former Transformer Pad, south of Storage and Service Building | Test pit to determine location of former MGP structures. |
| **GPEC-TP403** | **Area 7** | **Phase 3** | Former CNG Unit Area, former drain channel feature. | Test pit to determine location of former MGP structures and drain channel feature. |
| **GPEC-TP405** | **Area 7** | **Phase 3** | Paint and Oil Storage Area | Test pit to determine location of former MGP structures. |
| **GPEC-TP406** | **Area 7** | **Phase 3** | Paint and Oil Storage Area | Test pit to determine location of former MGP structures. |
| **GPEC-TP407** | **Area 7** | **Phase 3** | Former Producer Gas Holder area | Test pit to determine location of former MGP structures. |
| **GPEC-TP408** | **Area 7** | **Phase 3** | Former Producer Gas Holder area | Test pit to determine location of former MGP structures. |
| **GPEC-TP409** | **Area 7** | **Phase 3** | Former Booster Building Area | Test pit to determine location of former MGP structures. |
| **GPEC-TP411** | **Area 7** | **Phase 3** | Former Separator Pit near Boosting Building | Test pit to determine location of former MGP structures. |
| **GPEC-TP412** | **Area 7** | **Phase 3** | Near Coolers between Boosting and Gas Producing Building | Test pit to determine location of former MGP structures. |
| **GPEC-TP413** | **Area 7** | **Phase 3** | Former Gas Producing Building | Test pit to determine location of former MGP structures. |
| **GPEC-TP414** | **Area 7** | **Phase 3** | Former Gas Producing Building | Test pit to determine location of former MGP structures. |
| **GPEC-TP415** | **Area 7** | **Phase 3** | Former Boiler House | Test pit to determine location of former MGP structures. |
| **GPEC-TP416** | **Area 7** | **Phase 3** | Former Gas Producing Building | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP417** | **Area 7** | **Phase 3** | Underground Utilities | Test pit to determine location of underground utilities. |
| **GPEC-TP418** | **Area 7** | **Phase 3** | Former Coal & Coke Storage Area | Test pit to investigate shallow impacts noted during recent excavation activity in area |
| **GPEC-TP419** | **Area 7** | **Phase 3** | Former Coal & Coke Storage Area | Test pit to investigate shallow impacts noted during recent excavation activity in area |
| **GPEC-TP420** | **Area 7** | **Phase 3** | Former Coal & Coke Storage Area | Test pit to investigate shallow impacts noted during recent excavation activity in area |
| **GPEC-TP501** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of former MGP structures. |
| **GPEC-TP502** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP503** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP504** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP505** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of former MGP structures. |
| **GPEC-TP506** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of former MGP structures. |
| **GPEC-TP507** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP508** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP509** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP510** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP511** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP512** | **Area 6** | **Phase 3** | Former Oil Storage Tank utilities, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP513** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP514** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP515** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP516** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to determine location of underground utilities. |
| **GPEC-TP517** | **Area 8** | **Phase 3** | Former Generator House | Test pit to determine location of former MGP structures. |
| **GPEC-TP518** | **Area 8** | **Phase 3** | Underground Utilities | Test pit to determine location of underground utilities. |
| **GPEC-TP519** | **Area 8** | **Phase 3** | Former Generator House | Test pit to determine location of former MGP structures. |
| **GPEC-TP520** | **Area 8** | **Phase 3** | Former Generator House | Test pit to determine location of former MGP structures. |
| **GPEC-TP521** | **Area 8** | **Phase 3** | Former Generator House | Test pit to determine location of former MGP structures. |
| **GPEC-TP522** | **Area 8** | **Phase 3** | Former Relief Holder #1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP523** | **Area 8** | **Phase 3** | Former Relief Holder #1 | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP524** | **Area 8** | **Phase 3** | Former Oil Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP525** | **Area 8** | **Phase 3** | Former Treatment Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP526** | **Area 8** | **Phase 3** | Former Tar Separator Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP527** | **Area 8** | **Phase 3** | Former Salt Water Condensers | Test pit to determine location of former MGP structures. |
| **GPEC-TP528** | **Area 8** | **Phase 3** | Former Salt Water Condensers | Test pit to determine location of former MGP structures. |
| **GPEC-TP529** | **Area 8** | **Phase 3** | Former Scrubber | Test pit to determine location of former MGP structures. |
| **GPEC-TP530** | **Area 8** | **Phase 3** | Former Gas Mixer | Test pit to determine location of former MGP structures. |
| **GPEC-TP531** | **Area 8** | **Phase 3** | Former Spent Oil Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP532** | **Area 8** | **Phase 3** | Underground Utilities | Test pit to determine location of underground utilities. |
| **GPEC-TP533** | **Area 8** | **Phase 3** | Former Pump House | Test pit to determine location of former MGP structures. |
| **GPEC-TP534** | **Area 8** | **Phase 3** | Former Tar Separator | Test pit to determine location of former MGP structures. |
| **GPEC-TP535** | **Area 8** | **Phase 3** | Former Pressure Holder | Test pit to determine location of former MGP structures. |
| **GPEC-TP536** | **Area 8** | **Phase 3** | Former Bunker C Oil Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP537** | **Area 8** | **Phase 3** | Former Bunker C Oil Storage Tank | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP538** | **Area 8** | **Phase 3** | Former Wet Tar Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP539** | **Area 8** | **Phase 3** | Former Boiler Fuel Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP541** | **Area 8** | **Phase 3** | Former Tar Separator | Test pit to determine location of former MGP structures. |
| **GPEC-TP542** | **Area 8** | **Phase 3** | Former Tar Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP543** | **Area 8** | **Phase 3** | Former Tar Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP544** | **Area 8** | **Phase 3** | Former Residuum Oil Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP545** | **Area 8** | **Phase 3** | Former Residuum Oil Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP546** | **Area 8** | **Phase 3** | Former Waste Catalyst Area | Test pit to determine location of former MGP structures. |
| **GPEC-TP547** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP548** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP549** | **Area 8** | **Phase 3** | Former Dry Tar Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP550** | **Area 8** | **Phase 3** | Former Dry Tar Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP551** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP552** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP553** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP554** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP555** | **Area 8** | **Phase 3** | Former First Propane Storage Farm | Test pit to determine location of former MGP structures. |
| **GPEC-TP556** | **Area 8** | **Phase 3** | Former Motor Fuel Storage Tank #1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP557** | **Area 8** | **Phase 3** | Former Tar Pond | Test pit to determine location of former MGP feature. |
| **GPEC-TP559** | **Area 8** | **Phase 3** | Former Fuel Storage Tank #1 | Test pit to determine location of former MGP structures. |
| **GPEC-TP560** | **Area 8** | **Phase 3** | Former Residual Distillate Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP561** | **Area 8** | **Phase 3** | Former Residual Distillate Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP562** | **Area 8** | **Phase 3** | Former Crude Solvent Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP563** | **Area 8** | **Phase 3** | Former Second Propane Storage Farm | Test pit to determine location of former MGP structures. |
| **GPEC-TP564** | **Area 8** | **Phase 3** | Former Motor Fuel Storage Tank #2 | Test pit to determine location of former MGP structures. |
| **GPEC-TP565** | **Area 8** | **Phase 3** | Former Crude Solvent Storage Tank | Test pit to determine location of former MGP structures. |
| **GPEC-TP566** | **Area 8** | **Phase 3** | Former Motor Fuel Storage Tank #2 | Test pit to determine location of former MGP structures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-TP567** | **Area 9** | **Phase 3** | Former Gas Test Holder | Test pit to determine location of former MGP structures. |
| **GPEC-TP568** | **Area 9** | **Phase 3** | Former Purifiers | Test pit to determine location of former MGP structures. |
| **GPEC-TP569** | **Area 9** | **Phase 3** | Former Purifiers | Test pit to determine location of former MGP structures. |
| **GPEC-TP570** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to further investigate impacts noted in nearby test pits. |
| **GPEC-TP571** | **Area 6** | **Phase 3** | Former Oil Storage Tank, Tank Farm | Test pit to further investigate impacts noted in nearby test pits. |
| **GPEC-SS300** | **Bulkhead Area** | **Phase 3** | North area with vegetation | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS301** | **Bulkhead Area** | **Phase 3** | North area with vegetation | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS302** | **Bulkhead Area** | **Phase 3** | South area with vegetation | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS303** | **Area 4** | **Phase 3** | Area with vegetation near Control house | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS304** | **Area 5** | **Phase 3** | Area with vegetation near Holder 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS305** | **Area 5** | **Phase 3** | Area with vegetation near Holder 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS306** | **Area 5** | **Phase 3** | Area with vegetation near Holder 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS307** | **Area 7** | **Phase 3** | Area with vegetation near Service building | Surface soil sample to assess both human and ecological resource exposures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SS308** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS309** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS310** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS311** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS312** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS313** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS314** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS315** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS316** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 2 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS317** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS318** | **Area 8** | **Phase 3** | Area with vegetation near LNG # 1 | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS319** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS320** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS321** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SS322** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS323** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS324** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS325** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS326** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS327** | **Area 9** | **Phase 3** | Area with vegetation near Maspeth Holders | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS328** | **Area 9** | **Phase 3** | Area with vegetation near former Purifiers | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS329** | **Area 9** | **Phase 3** | Area with vegetation, ball field near Vandervoort Avenue | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS330** | **Area 9** | **Phase 3** | Area with vegetation, ball field near Vandervoort Avenue | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS331** | **Area 9** | **Phase 3** | Area with vegetation, south of Tank Farm | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS332** | **Area 9** | **Phase 3** | Area with vegetation, ball field near Vandervoort Avenue | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-SS333** | **Area 9** | **Phase 3** | Area with vegetation, ball field near Vandervoort Avenue | Surface soil sample to assess both human and ecological resource exposures. |
| **GPEC-TP421** | **Area 7** | **Capital Improvement - Drainage** | Along drainage line corridor in central part of Area 7 | Pit dug as part of capital improvement project, but characterized for environmental impacts. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-MW401** | **Area 9** | **Supplemental - Groundwater Model** | Northern part of Area 9 | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-MW402** | **Area 7** | **Supplemental - Groundwater Model** | Northern part of Area 7 | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-MW1D** | **Area 1** | **Supplemental - Groundwater Model** | Loading Platform Area | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **MW-2D** | **Area 6** | **Supplemental - Groundwater Model** | Loading Platform Area | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPE-MW2D2** | **Area 2** | **Supplemental - Groundwater Model** | Loading Platform Area | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-MW4D** | **Area 2** | **Supplemental - Groundwater Model** | Loading Platform Area | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-MW5D2** | **Area 2** | **Supplemental - Groundwater Model** | Loading Platform Area | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-GT1S** | **Area 4** | **Supplemental - Groundwater Model** | Along Maspeth Avenue | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-GT5I** | **Area 4** | **Supplemental - Groundwater Model** | Along Maspeth Avenue | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-GT5D** | **Area 4** | **Supplemental - Groundwater Model** | Along Maspeth Avenue | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-MW332I** | **Area 5** | **Supplemental - Groundwater Model** | Along Maspeth Avenue | Monitoring well installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to well installation. |
| **GPEC-SIS-101S** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. |
| **GPEC-SIS-102S** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. |
| **GPEC-SIS-102I** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to piezometer installation. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SIS-103S** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. |
| **GPEC-SIS-104S** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. |
| **GPEC-SIS-104I** | **Off-Site** | **Supplemental - Groundwater Model** | Within Maspeth Avenue | Piezometer installed to develop groundwater model for the Site. Soil boring advanced to characterize soil prior to piezometer installation. |
| **GPEC-MW403** | **Area 1** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-MW404** | **Area 1** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-SB404A** | **Area 1** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. |
| **GPEC-MW405** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-SB405A** | **Area 1** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. |
| **GPEC-MW406** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-SB406A** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. |
| **GPEC-MW407** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-SB407A** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. |
| **GPEC-MW408** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB408A** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. |
| **GPEC-MW409** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-RW409** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring advanced in area to investigate for the presence of NAPL. Recovery well installed in area. |
| **GPEC-MW410** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring and monitoring well installed in area to investigate for the presence of NAPL. |
| **GPEC-SB414** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring to delineate identified NAPL at 409 location. |
| **GPEC-SB415** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring to delineate identified NAPL at 409 location. |
| **GPEC-SB416** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring to delineate identified NAPL at 409 location. |
| **GPEC-SB417** | **Area 2** | **Supplemental - Loading Platform** | Loading Platform Area | Soil boring to delineate identified NAPL at 409 location. |
| **GPEC-SB701** | **Area 8** | **Capital Improvement Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB702** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB704** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB705** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB706** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB708** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |

**Table 3. Sample Descriptions and Rationale**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Sample Area | Investigation Phase | Sample Location | Sample Rationale |
|---|---|---|---|---|
| **GPEC-SB709** | **Area 8** | **Capital Improvement - Vaporizer Project** | Northeastern part of Area 8 - near vaporizers | Geotechnical boring. |
| **GPEC-SB801** | **Area 8** | **Capital Improvement - Ice Shield Project** | In the vicinity of the LNG tanks | Geotechnical boring. |
| **GPEC-SB802** | **Area 8** | **Capital Improvement - Ice Shield Project** | In the vicinity of the LNG tanks | Geotechnical boring. |
| **GPEC-SB803** | **Area 8** | **Capital Improvement - Ice Shield Project** | In the vicinity of the LNG tanks | Geotechnical boring. |
| **GPEC-SB804** | **Area 8** | **Capital Improvement - Ice Shield Project** | In the vicinity of the LNG tanks | Geotechnical boring. |
| **GPEC-SB901** | **Area 5** | **Capital Improvement - Pig Launcher Project** | Former Ballfield Area | Geotechnical boring. |
| **GPEC-SB902/MW902** | **Area 5** | **Capital Improvement - Pig Launcher Project** | Former Ballfield Area | Geotechnical boring. Monitoring well installed to evaluate groundwater flow. |
| **GPEC-SB903** | **Area 5** | **Capital Improvement - Pig Launcher Project** | Former Ballfield Area | Geotechnical boring. |
| **GPEC-SB904/MW904** | **Area 5** | **Capital Improvement - Pig Launcher Project** | Former Ballfield Area | Geotechnical boring. Monitoring well installed to evaluate groundwater flow. |
| **GPEC-MW905** | **Area 5** | **Capital Improvement - Pig Launcher Project** | Former Ballfield Area | Monitoring well installed to evaluate groundwater flow. |

**Table 4. Monitoring Well Construction Details and Groundwater Elevations Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Well ID | Northing(X) | Easting(Y) | Ground Elev. (NAVD 88) | Top of Case Elev. (NAVD 88) | Depth to Screen (ft bgs) | Well Screen Length (ft) | Total Depth of Well (ft bgs) | Top of Well Screen (NAVD 88) | Midpoint of Well Screen (NAVD 88) | Bottom of Well Screen. (NAVD 88) | 12/12/12 High Tide GW Elevation (NAVD 88) | 12/12/12 Low Tide GW Elevation (NAVD 88) | 10/9/15 High Tide GW Elevation (NAVD 88) | 10/9/15 Low Tide GW Elevation (NAVD 88) | 3/29/2017 Mid Tide GW Elevation (NAVD 88) | 10/28/2024 Mid Tide GW Elevation (NAVD 88) | 2024 Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Shallow Zone** | | | | | | | | | | | | | | | | | |
| GPE-MW-1S | N 689230.8 | E 650043.7 | 24.71 | 24.39 | 20.3 | 10.0 | 25.0 | 4.4 | -0.6 | -5.6 | 1.40 | 1.38 | 2.02 | 2.02 | 1.36 | 1.94 | |
| GPE-MW-2S | N 689368.3 | E 650599.6 | 7.56 | 7.05 | 2.8 | 10.0 | 13.0 | 4.8 | -0.2 | -5.2 | 2.78 | 2.90 | 3.48 | 3.57 | 3.44 | 2.55 | |
| GPE-MW-3S | N 689305.3 | E 650633.0 | 7.26 | 6.71 | 2.7 | 10.0 | 13.2 | 4.6 | -0.4 | -5.4 | 2.69 | 2.65 | 3.13 | 3.13 | -- | 2.46 | |
| GPE-MW-4S | N 689240.1 | E 650666.1 | 7.3 | 7.01 | 2.0 | 10.0 | 11.8 | 5.3 | 0.3 | -4.7 | 2.67 | 2.61 | 3.12 | 3.12 | 2.93 | 2.41 | |
| GPEC-GT1S | N 687038.2 | E 649697.4 | 11.46 | 11.43 | 5.0 | 10.0 | 15.0 | 6.46 | 1.46 | -3.54 | -- | -- | -- | -- | 6.45 | 4.45 | |
| GPEC-GT-3 (MW-16) | N 687177.5 | E 650075.8 | 12.75 | 14.46 | 2.0 | 15.0 | 19.0 | 10.8 | 3.3 | -4.3 | 7.53 | -- | 8.2 | 8.26 | 9.64 | 6.31 | |
| GPEC-GT-4S (MW-14S) | N 687253.7 | E 650292.1 | 12.19 | 11.84 | 3.0 | 15.0 | 19.3 | 9.2 | 1.7 | -5.8 | 4.13 | 4.23 | 4.81 | 4.87 | -- | -- | Could not access |
| GPEC-GT-5 (MW-15) | N 687291.7 | E 650420.7 | 12.09 | 14.16 | 5.0 | 15.0 | 22.1 | 7.1 | -0.4 | -7.9 | 1.06 | 0.96 | 4.26 | 4.2 | 3.58 | 3.74 | |
| GPEC-GT-10S (MW-17S) | 687625.71 | 651251.45 | 9.77 | 9.16 | 5.00 | 15.0 | 22.37 | 8.3 | 0.8 | -6.7 | 1.21 | -- | -- | -- | -- | 1.43 | Could not be located during Oct. 15 and Mar. 17 events |
| GPEC-MW-2 | N 688035.5 | E 651144.0 | 7.81 | 7.41 | 20.0 | 15.0 | 37.0 | -12.2 | -19.7 | -27.2 | 1.14 | 2.37 | 2.42 | 1.38 | 1.31 | 1.92 | |
| GPEC-MW-3WT | 688297.31 | 651074.81 | 9.95 | 9.70 | 3.00 | 10.0 | 14.29 | 7.0 | 2.0 | -3.1 | -- | -- | -- | -- | -- | 4.49 | |
| GPEC-MW-6 | N 687864.2 | E 650796.7 | 12.42 | 12.16 | 8.0 | 15.0 | 25.0 | 4.4 | -3.1 | -10.6 | 1.43 | 1.28 | 2.13 | 2.01 | -- | 1.74 | Could not be located during Mar. 17 event |
| GPEC-MW-9 | N 688506.2 | E 650269.0 | 16.46 | 16.05 | 10.0 | 15.0 | 27.0 | 6.5 | -1.0 | -8.5 | 1.60 | 1.60 | 2.21 | 2.19 | 1.57 | 2.07 | |
| GPEC-MW-101WT | N 687716.3 | E 650829.1 | 12.90 | 12.58 | 8.0 | 10.0 | 19.4 | 4.9 | -0.1 | -5.1 | 1.14 | 0.97 | 2.24 | 1.79 | 1.35 | 1.73 | |
| GPEC-MW-12 | N 687767.4 | E 649520.3 | 16.63 | 16.47 | 13.0 | 10.0 | 25.0 | 3.6 | -1.4 | -6.4 | 5.28 | 5.31 | 6.14 | 6.15 | 6.97 | 5.03 | |
| GPEC-MW-13 | N 688779.2 | E 649202.6 | 51.3 | 53.52 | 47.0 | 15.0 | 64.0 | 4.3 | -3.2 | -10.7 | 1.46 | 1.41 | 1.98 | 1.98 | 1.45 | -- | Abandoned |
| GPEC-MW201 | 68751.0 | 649960.0 | 12.5 | ND | 5.0 | 10.0 | 15.0 | ND | ND | ND | -- | -- | -- | -- | -- | -- | Removed during excavation in Maspeth Gate Station area |
| GPEC-MW202 | N 687655.9 | E 651060.3 | 10.03 | 9.44 | 7.0 | 15.0 | 22.0 | 3.0 | -4.5 | -12.0 | 1.43 | 1.49 | 2.18 | 2.15 | 1.87 | -- | Could not locate |
| GPEC-MW217S | N 688825.6 | E 650065.5 | 21.65 | 21.27 | 4.0 | 10.0 | 14.0 | 17.7 | 12.7 | 7.7 | 9.17 | 9.19 | 12.58 | 12.61 | 12.98 | 8.56 | |
| GPEC-MW219S | N 688280.13 | E 648862.58 | 43.07 | 45.50 | 25.0 | 10.0 | 35.0 | 18.1 | 13.1 | 8.1 | 1.72 | 1.71 | -- | -- | -- | -- | Re-installed after 2024 event |
| GPEC-MW220S | N 687489.8 | E 648649.9 | 22.13 | 21.62 | 15.0 | 10.0 | 25.0 | 7.1 | 2.1 | -2.9 | 2.05 | 2.04 | 2.40 | 2.42 | 1.93 | 2.54 | |
| GPEC-MW221S | N 687637.3 | E 649593.9 | 14.86 | 14.35 | 8.0 | 10.0 | 18.0 | 6.9 | 1.9 | -3.1 | 6.03 | 6.03 | 6.36 | 6.36 | 6.64 | 5.49 | |
| GPEC-MW222S | N 686982.2 | E 649230.6 | 13.86 | 13.57 | 2.0 | 10.0 | 12.0 | 11.9 | 6.9 | 1.9 | 8.35 | 8.37 | 8.44 | 8.53 | 12.65 | -- | Could not locate |
| GPEC-MW339S | N 687187.6 | E 648749.9 | 14.8 | 17.7 | 3.0 | 10.0 | 13.0 | 11.8 | 6.8 | 1.8 | -- | -- | 6.67 | 6.75 | 10.57 | 5.65 | |
| GPEC-MW344S | N 686803.6 | E 648873.2 | 15.27 | 18.18 | 8.0 | 10.0 | 18.0 | 7.27 | 2.3 | -2.73 | -- | -- | 7.94 | 7.98 | 10.56 | 7.47 | |
| GPEC-MW505S | N 688504.9 | E 648736.9 | 49.55 | 52.00 | 43.0 | 10.0 | 53.0 | 6.55 | 1.55 | -3.45 | -- | -- | -- | -- | -- | -- | Damaged |
| GPEC-MW513S | N 687850.4 | E 648488.2 | 33.90 | 33.72 | 27.0 | 10.0 | 37.0 | 6.90 | 1.90 | -3.10 | -- | -- | -- | -- | -- | 2.42 | |
| GPEC-MW514 | N 688116.6 | E 648384.7 | 38.38 | 38.12 | 30.0 | 10.0 | 40.0 | 8.38 | 3.38 | -1.62 | -- | -- | -- | -- | -- | 2.35 | |
| GPEC-MW537 | N 688989.2 | E 649348.4 | 44.46 | 44.19 | 42.0 | 10.0 | 52.0 | 2.46 | -2.54 | -7.54 | -- | -- | -- | -- | -- | 2.00 | |
| GPEC-MW538 | N 689102.3 | E 649634.8 | 31.92 | 31.50 | 28.0 | 10.0 | 38.0 | 3.92 | -1.08 | -6.08 | -- | -- | -- | -- | -- | 3.74 | |
| GPEC-MW902 | N 686821.6 | E 648958.7 | 15.04 | 14.62 | 8.0 | 10.0 | 18.0 | 7.04 | 2.04 | -2.96 | -- | -- | -- | -- | -- | -- | Could not access |
| GPEC-MW904 | N 686895.1 | E 648933.7 | 16.10 | 15.69 | 8.0 | 10.0 | 18.0 | 8.10 | 3.10 | -1.90 | -- | -- | -- | -- | -- | -- | Could not access |
| GPEC-MW905 | N 686804.4 | E 648929.6 | 15.42 | 15.09 | 8.0 | 10.0 | 18.0 | 7.42 | 2.42 | -2.58 | -- | -- | -- | -- | -- | -- | Could not access |
| GPEC-PZ302 | N 687473.4 | E 650906.8 | 12.05 | 11.56 | 7.0 | 10.0 | 17.0 | 5.05 | 0.1 | -4.95 | -- | -- | 2.14 | 2.18 | 2.20 | 1.66 | |
| GPEC-PZ305 | N 687269.0 | E 649292.0 | 14.22 | 17.26 | 2.0 | 10.0 | 12.0 | 12.22 | 7.2 | 2.22 | -- | -- | 9.92 | 9.94 | -- | -- | Could not be located in 2024 |
| GPEC-PZ306 | N 687356.6 | E 650599.7 | 11.72 | 12.08 | 1.0 | 10.0 | 11.0 | 10.72 | 5.7 | 0.72 | -- | -- | 2.39 | 1.40 | 1.60 | 1.90 | |
| GPEC-PZ309 | N 687271.3 | E 649837.5 | 11.64 | 11.52 | 5.0 | 10.0 | 15.0 | 6.64 | 1.6 | -3.36 | -- | -- | 6.55 | 6.61 | -- | -- | Could not be located in 2024 |
| GPEC-PZ311 | N 687446.8 | E 650187.0 | 12.29 | 12.02 | 2.0 | 10.0 | 12.0 | 10.29 | 5.3 | 0.29 | -- | -- | 7.80 | 8.19 | 9.59 | -- | Could not be located in 2024 |
| GPEC-PZ314 | N 687516.7 | E 650187.0 | 13.13 | 12.84 | 1.0 | 10.0 | 11.0 | 12.13 | 7.1 | 2.13 | -- | -- | 4.78 | 4.79 | 5.33 | 4.23 | |
| GPEC-PZ316 | N 687190.8 | E 650158.2 | 11.77 | 11.45 | 1.0 | 10.0 | 11.0 | 10.77 | 5.8 | 0.77 | -- | -- | 8.06 | 8.05 | 9.16 | 5.75 | |
| GPEC-PZ320 | N 687405.5 | E 649799.0 | 12.38 | 12.14 | 5.0 | 10.0 | 15.0 | 7.38 | 2.4 | -2.62 | -- | -- | 6.07 | 5.96 | 6.40 | -- | Could not be located in 2024 |
| GPEC-PZ322 | N 687654.6 | E 650535.8 | 13.74 | 13.58 | 12.0 | 10.0 | 22.0 | 1.74 | -3.3 | -8.26 | -- | -- | 2.17 | 2.05 | 1.43 | 1.85 | |
| GPEC-PZ323 | N 687707.9 | E 650722.5 | 14.79 | 14.5 | 12.0 | 10.0 | 22.0 | 2.79 | -2.2 | -7.21 | -- | -- | 1.94 | 1.91 | 1.21 | 1.52 | |

**Table 4. Monitoring Well Construction Details and Groundwater Elevations Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Well ID | Northing(X) | Easting(Y) | Ground Elev. (NAVD 88) | Top of Case Elev. (NAVD 88) | Depth to Screen (ft bgs) | Well Screen Length (ft) | Total Depth of Well (ft bgs) | Top of Well Screen (NAVD 88) | Midpoint of Well Screen (NAVD 88) | Bottom of Well Screen. (NAVD 88) | 12/12/12 High Tide GW Elevation (NAVD 88) | 12/12/12 Low Tide GW Elevation (NAVD 88) | 10/9/15 High Tide GW Elevation (NAVD 88) | 10/9/15 Low Tide GW Elevation (NAVD 88) | 3/29/2017 Mid Tide GW Elevation (NAVD 88) | 10/28/2024 Mid Tide GW Elevation (NAVD 88) | 2024 Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| GPEC-PZ325 | N 687324.0 | E 649987.1 | 12.2 | 11.87 | 3.0 | 10.0 | 13.0 | 9.2 | 4.2 | -0.8 | -- | -- | 9.26 | 9.37 | -- | -- | Could not be located during Mar. 17 round |
| GPEC-PZ328 | N 687122.7 | E 649826.8 | 11.56 | 11.39 | 3.0 | 10.0 | 13.0 | 8.56 | 3.6 | -1.44 | -- | -- | 5.40 | 5.52 | -- | 4.11 | Could not be located during Mar. 17 round |
| GPEC-PZ329 | N 687419.2 | E 649720.2 | 12.55 | 12.21 | 5.0 | 10.0 | 15.0 | 7.55 | 2.6 | -2.45 | -- | -- | 5.97 | 5.96 | 6.42 | -- | Could not be located in 2024 |
| GPEC-PZ330 | N 687242.2 | E 649463.5 | 14.39 | 14.1 | 7.0 | 10.0 | 17.0 | 7.39 | 2.4 | -2.61 | -- | -- | 7.01 | 7.00 | 8.46 | -- | Could not be located in 2024 |
| GPEC-PZ332 | N 687242.2 | E 649463.5 | 13.46 | 13.16 | 2.0 | 10.0 | 12.0 | 11.46 | 6.5 | 1.46 | -- | -- | 8.24 | 8.17 | 11.96 | -- | Could not be located in 2024 |
| GPEC-PZ333 | N 686888.6 | E 649125.9 | 14.24 | 14.04 | 2.0 | 10.0 | 12.0 | 12.2 | 7.2 | 2.2 | -- | -- | -- | -- | -- | 7.12 | |
| GPEC-PZ340 | N 686884.5 | E 648840.7 | 15.81 | 15.54 | 3.0 | 10.0 | 13.0 | 12.81 | 7.8 | 2.81 | -- | -- | 8.12 | 8.14 | -- | -- | Could not be located in 2024 |
| GPEC-PZ342 | N 687258.9 | E 648925.5 | 14.35 | 17.73 | 3.0 | 10.0 | 13.0 | 11.35 | 6.4 | 1.35 | -- | -- | 11.42 | 11.48 | 14.09 | -- | Could not be located in 2024 |
| GPEC-PZ343 | N 687454.7 | E 648923.9 | 16.06 | 18.86 | 2.0 | 10.0 | 12.0 | 14.06 | 9.1 | 4.06 | -- | -- | 6.98 | 7.06 | 9.12 | -- | Could not be located in 2024 |
| GPEC-PZ346 | N 687573.7 | E 650262.4 | 12.61 | 12.31 | 3.0 | 10.0 | 13.0 | 9.61 | 4.6 | -0.39 | -- | -- | 6.77 | 6.83 | -- | 5.59 | Damaged |
| GPEC-RW304 | N 687205.6 | E 649210.2 | 14.86 | 17.81 | 6.0 | 15.0 | 21.0 | 8.86 | 1.36 | -6.14 | -- | -- | -- | -- | 12.50 | 7.40 | |
| GPEC-RW332 | N 686986.5 | E 649446.0 | 13.50 | 16.15 | 14.0 | 10.0 | 24.0 | -0.50 | -5.50 | -10.50 | -- | -- | -- | -- | 11.92 | 7.02 | |
| GPEC-SIS-2 | N 687838.8 | E 650728.8 | 14.08 | 13.78 | 8.0 | 10.0 | 17.8 | 6.1 | 1.1 | -3.9 | 1.34 | 0.84 | 2.13 | 2.48 | -- | 1.75 | |
| GPEC-SIS-3 | N 687881.8 | E 650714.2 | 12.48 | 12.3 | 8.0 | 10.0 | 17.8 | 4.5 | -0.5 | -5.5 | 1.37 | 1.32 | 2.16 | 2.10 | -- | -- | Could not be located in 2024 |
| GPEC-SIS-4 | N 687907.4 | E 650703.9 | 12.71 | 12.44 | 8.0 | 10.0 | 17.1 | 4.7 | -0.3 | -5.3 | 1.40 | 1.37 | 2.19 | 2.14 | -- | -- | Could not be located in 2024 |
| GPEC-SIS-5 | 688003.84 | 650673.83 | 11.57 | 11.26 | 4.00 | 10.0 | 14.00 | 7.6 | 2.6 | -2.4 | -- | -- | -- | -- | -- | -- | Damaged |
| GPEC-SIS-6 | 687221.35 | 649914.90 | 14.79 | 14.30 | 5.00 | 10.0 | 14.48 | 9.8 | 4.8 | -0.2 | 5.92 | 5.89 | -- | -- | 6.65 | -- | Damaged |
| GPEC-SIS-7 | 687150.73 | 649940.17 | 15.39 | 15.06 | 2.00 | 10.0 | 12.00 | 13.4 | 8.4 | 3.4 | -- | -- | -- | -- | -- | -- | Damaged |
| GPEC-SIS-8 | 687112.35 | 649955.73 | 15.46 | 15.14 | 1.00 | 10.0 | 10.41 | 14.5 | 9.5 | 4.5 | -- | -- | -- | -- | -- | -- | Damaged |
| GPEC-SIS-101S | N 687064.9 | E 649869.7 | 11.51 | 11.28 | 6.0 | 5.0 | 11.0 | 5.51 | 3.01 | 0.51 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| GPEC-SIS-102S | N 687054.8 | E 649876.5 | 11.95 | 11.73 | 6.0 | 5.0 | 11.0 | 5.95 | 3.45 | 0.95 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| GPEC-SIS-102I | N 687056.3 | E 649881.6 | 11.99 | 11.75 | 14.0 | 5.0 | 19.0 | -2.01 | -4.51 | -7.01 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| GPEC-SIS-103S | N 687257.8 | E 650430.7 | 11.64 | 11.34 | 9.0 | 5.0 | 14.0 | 2.64 | 0.14 | -2.36 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| GPEC-SIS-104S | N 687247.9 | E 650430.4 | 11.86 | 11.58 | 9.0 | 5.0 | 14.0 | 2.86 | 0.36 | -2.14 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| GPEC-SIS-104I | N 687249.8 | E 650436.3 | 11.86 | 11.56 | 17.0 | 5.0 | 22.0 | -5.14 | -7.64 | -10.14 | -- | -- | -- | -- | -- | -- | Off-site in roadway |
| MW-2 | N 688814.7 | E 648815.1 | 57.08 | 59.4 | 46.0 | 10.0 | 62.7 | 11.1 | 6.1 | 1.1 | 1.39 | 1.39 | 1.92 | 2.02 | 1.37 | 1.94 | |
| MW-3 | N 688843.8 | E 649064.5 | 52.68 | 54.81 | 40.8 | 10.0 | 62.7 | 11.9 | 6.9 | 1.9 | 1.49 | 1.47 | 1.97 | 1.99 | 1.42 | 2.01 | |
| MW-4 | N 688659.1 | E 649126.7 | 49.77 | 51.64 | 37.9 | 10.0 | 54.7 | 11.9 | 6.9 | 1.8 | 1.50 | 1.51 | 2.03 | 2.04 | 1.51 | 2.27 | |
| MW-5 | N 688506.5 | E 649179.6 | 44.5 | 47.2 | 40.1 | 10.0 | 49.9 | 4.4 | -0.6 | -5.6 | 1.65 | 1.81 | 2.12 | 2.14 | 1.56 | 2.17 | |
| PZ-1 | N 688849.4 | E 649059.0 | 52.74 | 55.2 | 44.9 | 10.0 | 62.7 | 7.8 | 2.8 | -2.2 | 1.43 | 1.44 | 1.95 | 1.96 | 1.43 | 2.01 | |
| PZ-2 | N 689056.57 | E 650800.6 | 9.85 | 12.09 | ND | ND | ND | ND | ND | ND | 0.53 | 1.19 | -- | -- | -- | -- | Destroyed |
| W-1 | N 687377.3 | E 650602.6 | 12.68 | 12.15 | 5.0 | 15.0 | 19.6 | 7.7 | 0.2 | -7.3 | 0.87 | 0.37 | 2.04 | 2.00 | 1.26 | 0.70 | |
| W-2 | N 687389.5 | E 650641.2 | 13.02 | 12.49 | 5.0 | 15.0 | 19.5 | 8.0 | 0.5 | -7.0 | 1.27 | 1.15 | 2.06 | 2.02 | 1.29 | 1.74 | |
| W-3 | N 687236.94 | E 650489.69 | 14.89 | 14.59 | 5.0 | 10.0 | 17.2 | 9.9 | 4.9 | -0.1 | -- | -- | -- | -- | -- | -- | Destroyed |
| W-4 | N 687264.46 | E 650563.5 | 14.35 | 14.13 | 5.00 | 10.0 | 17.1 | 9.4 | 4.4 | -0.7 | -- | -- | -- | -- | -- | -- | Destroyed |

**Table 4. Monitoring Well Construction Details and Groundwater Elevations Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Well ID | Northing(X) | Easting(Y) | Ground Elev. (NAVD 88) | Top of Case Elev. (NAVD 88) | Depth to Screen (ft bgs) | Well Screen Length (ft) | Total Depth of Well (ft bgs) | Top of Well Screen (NAVD 88) | Midpoint of Well Screen (NAVD 88) | Bottom of Well Screen. (NAVD 88) | 12/12/12 High Tide GW Elevation (NAVD 88) | 12/12/12 Low Tide GW Elevation (NAVD 88) | 10/9/15 High Tide GW Elevation (NAVD 88) | 10/9/15 Low Tide GW Elevation (NAVD 88) | 3/29/2017 Mid Tide GW Elevation (NAVD 88) | 10/28/2024 Mid Tide GW Elevation (NAVD 88) | 2024 Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Intermediate Zone** | | | | | | | | | | | | | | | | | |
| GPE-MW-1D | N 689233.7 | E 650045.1 | 24.58 | 24.45 | 46.2 | 10.0 | 56.5 | -21.6 | -26.6 | -31.6 | 1.40 | 1.88 | 2.03 | 2.03 | 1.47 | 1.94 | |
| GPE-MW-2D | N 689370.8 | E 650606.3 | 7.6 | 7.08 | 21.8 | 10.0 | 32.4 | -14.2 | -19.2 | -24.2 | 2.87 | 2.91 | 3.40 | 3.35 | 3.13 | 2.43 | |
| GPE-MW-3D | N 689307.4 | E 650643.7 | 7.16 | 6.81 | 30.3 | 10.0 | 41.4 | -23.2 | -28.2 | -33.2 | 1.95 | 2.10 | 2.37 | 2.02 | -- | -- | Could not access |
| GPE-MW-4D | N 689240.9 | E 650672.0 | 7.47 | 7.06 | 31.4 | 10.0 | 43.2 | -23.9 | -28.9 | -33.9 | 2.72 | 2.47 | 2.94 | 2.82 | 2.66 | 2.36 | |
| GPEC-GT-1 (MW-18) | N 687047.6 | E 649699.3 | 11.30 | 10.98 | 30.0 | 10.0 | 39.8 | -18.7 | -23.7 | -28.7 | 0.77 | 0.71 | 1.68 | 1.77 | 0.97 | 1.28 | |
| GPEC-GT-4D (MW-14D) | N 687256.6 | E 650302.0 | 12.23 | 11.85 | 54.0 | 15.0 | 69.4 | -41.8 | -49.3 | -56.8 | 1.63 | 0.75 | 2.03 | 1.83 | 0.50 | -- | Could not access |
| GPEC-GT5I | N 687298.2 | E 650424.3 | 12.26 | 11.94 | 30.0 | 10.0 | 40.0 | -17.74 | -22.74 | -27.74 | -- | -- | -- | -- | 1.31 | 1.48 | |
| GPEC-GT-7 (MW-19) | N 687412.1 | E 650762.7 | 12.51 | 12.24 | 30.0 | 15.0 | 46.9 | -17.5 | -25.0 | -32.5 | 1.59 | 0.94 | 2.15 | 1.82 | 1.30 | -- | Could not access |
| GPEC-GT-10 (MW-17i) | N 687649.6 | E 651321.7 | 8.27 | 8.05 | 43.0 | 15.0 | 59.0 | -34.7 | -42.2 | -49.7 | -0.50 | -- | -2.62 | 1.03 | 1.32 | 1.57 | |
| GPEC-MW-1 | N 687750.58 | E 651249.63 | 11.65 | 11.21 | 43.00 | 15.0 | 64.22 | -31.4 | -38.9 | -46.4 | -- | -- | -- | -- | -- | -- | Abandoned and replaced with GPEC-MW01R |
| GPEC-MW-1R | N 687778.9 | E 651236.8 | 8.40 | 8.01 | 50.0 | 10.0 | 65.0 | -41.6 | -46.6 | -51.6 | 1.55 | -- | 1.40 | 0.30 | 1.31 | -- | NAPL |
| GPEC-MW-3S | N 688289.3 | E 651055.0 | 7.02 | 6.52 | 25.0 | 15.0 | 42.0 | -18.0 | -25.5 | -33.0 | 0.70 | -1.32 | 2.46 | 0.53 | 1.29 | 1.74 | |
| GPEC-MW-4 | N 688532.6 | E 650941.3 | 6.19 | 8.83 | 50.0 | 15.0 | 67.0 | -43.8 | -51.3 | -58.8 | 1.16 | 1.27 | 4.49 | 1.71 | 1.91 | 3.60 | |
| GPEC-MW-5S | N 688982.2 | E 650750.2 | 6.66 | 9.15 | 28.0 | 10.0 | 40.0 | -21.3 | -26.3 | -31.3 | 1.43 | 2.01 | 2.31 | 1.91 | 1.74 | 1.90 | |
| GPEC-MW-8 | N 688452.1 | E 650558.5 | 5.77 | 8.24 | 50.0 | 10.0 | 62.0 | -44.2 | -49.2 | -54.2 | 1.67 | 1.24 | 2.28 | -0.92 | 1.65 | 1.92 | |
| GPEC-MW-10 | N 687734.61 | E 650394.25 | 17.14 | 16.85 | 40.00 | 15.0 | 55.70 | -22.9 | -30.4 | -37.9 | 1.50 | 1.23 | -- | -- | -- | -- | Destroyed |
| GPEC-MW-11 | N 687965.9 | E 650054.0 | 13.46 | 13.37 | 33.0 | 15.0 | 50.0 | -19.5 | -27.0 | -34.5 | 1.49 | 1.92 | 2.32 | 2.27 | 1.62 | 0.55 | |
| GPEC-MW-103 | N 687797.1 | E 651251.7 | 7.68 | 7.46 | 50.0 | 10.0 | 65.1 | -42.3 | -47.3 | -52.3 | 0.12 | 1.77 | 2.40 | 1.21 | 1.43 | 2.01 | |
| GPEC-MW217I | N 688825.8 | E 650059.0 | 21.86 | 21.35 | 30.0 | 10.0 | 40.0 | -8.1 | -13.1 | -18.1 | 1.49 | 1.48 | 2.14 | 2.15 | 1.51 | 2.03 | |
| GPEC-MW218I | N 688779.1 | E 649215.5 | 51.05 | 53.37 | 75.0 | 10.0 | 85.0 | -24.0 | -29.0 | -34.0 | 1.47 | 1.46 | 2.01 | 2.04 | 1.47 | -- | Abandoned |
| GPEC-MW219I | N 688281.46 | E 648858.77 | 43.15 | 45.80 | 60.00 | 10.0 | 70.0 | -16.9 | -21.9 | -26.9 | 1.71 | 1.70 | -- | -- | -- | -- | Re-installed after 2024 event |
| GPEC-MW220I | N 687491.6 | E 648654.9 | 22.06 | 21.73 | 40.0 | 10.0 | 50.0 | -17.9 | -22.9 | -27.9 | 2.02 | 2.02 | 2.40 | 2.42 | 1.94 | 2.54 | |
| GPEC-MW221I | N 687636.1 | E 649590.0 | 14.81 | 14.40 | 45.0 | 10.0 | 55.0 | -30.2 | -35.2 | -40.2 | 1.74 | 1.53 | 2.28 | 2.22 | 1.70 | 2.22 | |
| GPEC-MW306I | N 687358.9 | E 650603.0 | 12.06 | 11.61 | 30.0 | 10.0 | 40.0 | -17.9 | -22.9 | -27.9 | -- | -- | 2.04 | 2.00 | 1.26 | 1.73 | |
| GPEC-MW328I | N 687119.1 | E 649827.2 | 11.86 | 11.63 | 30.0 | 10.0 | 40.0 | -18.1 | -23.1 | -28.1 | -- | -- | 1.55 | 1.65 | 0.61 | 1.31 | |
| GPEC-MW332I | N 686986.5 | E 649440.6 | 13.86 | 16.10 | 35.0 | 10.0 | 45.0 | -21.14 | -26.14 | -31.14 | -- | -- | -- | -- | 1.18 | 1.31 | |
| GPEC-MW333I | N 686893.3 | E 649132.0 | 14.34 | 14.11 | 30.0 | 10.0 | 40.0 | -15.7 | -20.7 | -25.7 | -- | -- | 2.39 | 2.49 | 1.91 | -- | Could not access |
| GPEC-MW339I | N 687188.6 | E 648744.4 | 14.92 | 17.57 | 30.0 | 10.0 | 40.0 | -15.1 | -20.1 | -25.1 | -- | -- | 2.56 | 2.57 | 2.15 | 2.65 | |
| GPEC-MW344I | N 686805.2 | E 648877.3 | 15.38 | 18.11 | 30.0 | 10.0 | 40.0 | -14.6 | -19.6 | -24.6 | -- | -- | 2.25 | 2.30 | 1.91 | 2.42 | |
| GPEC-MW403 | N 687735.5 | E 651255.2 | 7.91 | 7.49 | 33.5 | 10.0 | 43.5 | -25.59 | -30.59 | -35.59 | -- | -- | -- | -- | 1.50 | 1.98 | |
| GPEC-MW404 | N 687856.8 | E 651232.1 | 8.49 | 7.88 | 35.0 | 10.0 | 45.0 | -26.51 | -31.51 | -36.51 | -- | -- | -- | -- | -- | 1.96 | |
| GPEC-MW405 | N 687954.8 | E 651191.1 | 8.58 | 8.15 | 40.0 | 10.0 | 50.0 | -31.42 | -36.42 | -41.42 | -- | -- | -- | -- | 1.53 | 1.89 | |
| GPEC-MW408 | N 688217.6 | E 651101.4 | 6.93 | 6.73 | 35.0 | 10.0 | 45.0 | -28.07 | -33.07 | -38.07 | -- | -- | -- | -- | -- | -- | Could not access |
| GPEC-MW409 | N 688274.2 | E 651085.0 | 6.90 | 6.70 | 40.0 | 10.0 | 50.0 | -33.10 | -38.10 | -43.10 | -- | -- | -- | -- | 1.94 | -- | Could not access |
| GPEC-MW410 | N 688320.9 | E 651067.5 | 6.46 | 6.07 | 25.0 | 10.0 | 35.0 | -18.54 | -23.54 | -28.54 | -- | -- | -- | -- | -- | 1.49 | |
| GPEC-MW513D | N 687846.2 | E 648475.2 | 33.50 | 33.33 | 78.0 | 10.0 | 88.0 | -44.50 | -49.50 | -54.50 | -- | -- | -- | -- | -- | 2.50 | |
| GPEC-RW409 | N 688280.5 | E 651080.3 | 6.71 | 6.42 | 29.0 | 10.0 | 44.0 | -22.29 | -29.79 | -37.29 | -- | -- | -- | -- | -- | 0.33 | |

**Table 4. Monitoring Well Construction Details and Groundwater Elevations Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Well ID | Northing(X) | Easting(Y) | Ground Elev. (NAVD 88) | Top of Case Elev. (NAVD 88) | Depth to Screen (ft bgs) | Well Screen Length (ft) | Total Depth of Well (ft bgs) | Top of Well Screen (NAVD 88) | Midpoint of Well Screen (NAVD 88) | Bottom of Well Screen. (NAVD 88) | 12/12/12 High Tide GW Elevation (NAVD 88) | 12/12/12 Low Tide GW Elevation (NAVD 88) | 10/9/15 High Tide GW Elevation (NAVD 88) | 10/9/15 Low Tide GW Elevation (NAVD 88) | 3/29/2017 Mid Tide GW Elevation (NAVD 88) | 10/28/2024 Mid Tide GW Elevation (NAVD 88) | 2024 Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Deep Zone** | | | | | | | | | | | | | | | | | |
| GPE-MW2D2 | N 689367.2 | E 650595.5 | 7.52 | 6.97 | 100.0 | 20.0 | 120.0 | -92.48 | -102.48 | -112.48 | -- | -- | -- | -- | 0.98 | 1.47 | |
| GPEC-GT5D | N 687307.2 | E 650421.1 | 12.22 | 11.81 | 157.0 | 20.0 | 177.0 | -144.78 | -154.78 | -164.78 | -- | -- | -- | -- | -1.92 | -- | Could not access |
| GPEC-MW1D | N 687801.6 | E 651248.8 | 7.38 | 7.16 | 60.0 | 10.0 | 70.0 | -52.62 | -57.62 | -62.62 | -- | -- | -- | -- | 1.29 | 2.10 | |
| GPEC-MW-2D | N 651161.0752 | E 688040.5608 | 11.62 | 10.46 | 75.0 | 15.0 | 92.0 | -64.5 | -69.5 | -74.5 | 0.88 | 1.77 | -- | -- | -- | -- | Abandoned |
| GPEC-MW-3D | N 688301.0 | E 651051.6 | 7.05 | 6.61 | 90.0 | 15.0 | 107.0 | -83.0 | -90.5 | -98.0 | 1.21 | -0.08 | 2.44 | 1.57 | -- | 1.93 | Could not access |
| GPEC-MW4D | N 688535.4 | E 650951.9 | 6.07 | 9.24 | 90.0 | 10.0 | 100.0 | -83.93 | -88.93 | -93.93 | -- | -- | -- | -- | 1.95 | 4.28 | |
| GPEC-MW-5D | N 688966.6 | E 650756.0 | 6.96 | 9.71 | 65.0 | 15.0 | 82.0 | -58.0 | -65.5 | -73.0 | 1.49 | 1.52 | 2.37 | 1.95 | 1.82 | 2.70 | |
| GPEC-MW5D2 | N 688970.3 | E 650767.1 | 6.81 | 10.01 | 150.0 | 20.0 | 170.0 | -143.19 | -153.19 | -163.19 | -- | -- | -- | -- | -0.37 | -1.68 | |
| GPEC-MW-7D | N 688126.2 | E 650777.8 | 7.09 | 6.89 | 79.0 | 15.0 | 96.0 | -71.9 | -79.4 | -86.9 | -- | -- | 2.15 | 1.85 | -- | -- | Monitoring well damaged |
| GPEC-MW-11D | N 687995.8 | E 650043.3 | 13.64 | 13.20 | 80.0 | 10.0 | 91.3 | -66.4 | -71.4 | -76.4 | 1.63 | 1.68 | 2.18 | 2.29 | 1.75 | -0.89 | |
| GPEC-MW-101I | N 687714.4 | E 650838.4 | 12.73 | 12.39 | 65.0 | 10.0 | 77.3 | -52.3 | -57.3 | -62.3 | 1.40 | 0.59 | 2.25 | 1.75 | 1.41 | 1.80 | |
| GPEC-MW-101D | N 687711.2 | E 650822.8 | 13.09 | 12.53 | 97.0 | 15.0 | 109.8 | -83.9 | -91.4 | -98.9 | 1.49 | 0.58 | 2.06 | 1.69 | 3.70 | 1.51 | |
| GPEC-MW-102D | N 687528.3 | E 651026.2 | 9.85 | 9.51 | 85.0 | 10.0 | 97.7 | -75.2 | -80.2 | -85.2 | 1.65 | -0.06 | 2.32 | 1.35 | 1.35 | -- | Could not access |
| GPEC-SB/MW205 | N 687861.1 | E 651230.2 | 8.63 | 8.02 | 65.0 | 10.0 | 75.0 | -56.4 | -61.4 | -66.4 | 2.01 | -- | 2.41 | 1.27 | 1.56 | -- | NAPL |
| GPEC-MW217D | N 688824.1 | E 650048.7 | 22.01 | 21.48 | 65.0 | 10.0 | 80.0 | -43.0 | -48.0 | -53.0 | 1.52 | 1.47 | 2.16 | 2.16 | 1.53 | 1.85 | |
| GPEC-MW218D | N 688791.3 | E 649212.6 | 51.31 | 53.73 | 95.0 | 10.0 | 105.0 | -43.7 | -48.7 | -53.7 | 1.45 | 1.45 | 2.01 | 2.02 | 1.45 | -- | abandoned |
| GPEC-MW219D | N 688284.15 | E 648863.15 | 43.19 | 45.87 | 90.00 | 10.0 | 100.0 | -46.8 | -51.8 | -56.8 | 1.75 | 1.71 | -- | -- | -- | -- | Re-installed after 2024 event |
| GPEC-MW220D | N 687493.0 | E 648659.2 | 21.93 | 21.70 | 70.0 | 10.0 | 80.0 | -48.1 | -53.1 | -58.1 | 2.02 | 2.04 | 2.43 | 2.44 | 1.94 | 2.60 | |
| GPEC-MW221D | N 687634.8 | E 649584.9 | 14.71 | 14.14 | 80.0 | 10.0 | 90.0 | -65.3 | -70.3 | -75.3 | 1.79 | 1.59 | 2.32 | 2.25 | 1.75 | 2.26 | |
| GPEC-MW222D | N 686985.6 | E 649226.2 | 13.88 | 13.37 | 70.0 | 10.0 | 80.0 | -56.1 | -61.1 | -66.1 | 2.12 | 1.97 | 2.49 | 2.48 | 1.98 | 2.42 | |
| GPEC-MW306D | N 687360.0 | E 650607.2 | 12.06 | 11.77 | 65.0 | 10.0 | 75.0 | -52.9 | -57.9 | -62.9 | -- | -- | 2.21 | 1.81 | 1.36 | 1.82 | |
| GPEC-MW328D | N 687119.3 | E 649823.8 | 11.86 | 11.45 | 63.0 | 10.0 | 73.0 | -51.1 | -56.1 | -61.1 | -- | -- | 2.33 | 1.91 | 1.48 | 2.10 | |
| GPEC-MW333D | N 686892.3 | E 649128.1 | 14.38 | 14.10 | 65.0 | 10.0 | 75.0 | -50.6 | -55.6 | -60.6 | -- | -- | 2.46 | 2.34 | 1.83 | -- | Could not access |
| GPEC-MW339D | N 687188.8 | E 648739.3 | 15.22 | 17.91 | 56.0 | 10.0 | 66.0 | -40.8 | -45.8 | -50.8 | -- | -- | 2.56 | 2.57 | 2.15 | 2.59 | |
| GPEC-MW344D | N 686805.6 | E 648882.1 | 15.31 | 15.00 | 65.0 | 10.0 | 75.0 | -49.7 | -54.7 | -59.7 | -- | -- | 2.77 | 2.77 | 2.42 | 3.09 | |
| GPEC-MW401 | N 688086.3 | E 649002.4 | 30.02 | 29.68 | 77.0 | 10.0 | 87.0 | -46.98 | -51.98 | -56.98 | -- | -- | -- | -- | 1.64 | 2.34 | |
| GPEC-MW402 | N 688085.3 | E 650300.8 | 13.50 | 16.39 | 90.0 | 10.0 | 100.0 | -76.50 | -81.50 | -86.50 | -- | -- | -- | -- | 1.57 | 1.97 | |
| GPEC-MW406 | N 688047.5 | E 651161.0 | 7.44 | 6.75 | 55.0 | 5.0 | 60.0 | -47.56 | -50.06 | -52.56 | -- | -- | -- | -- | -- | -- | Could not access |
| GPEC-MW407 | N 688153.0 | E 651129.4 | 7.26 | 6.71 | 60.0 | 10.0 | 70.0 | -52.74 | -57.74 | -62.74 | -- | -- | -- | -- | 1.36 | 1.28 | |
| GPEC-MW502 | N 688860.1 | E 648952.8 | 56.45 | 59.53 | 103.0 | 10.0 | 113.0 | -46.55 | -51.55 | -56.55 | -- | -- | -- | -- | -- | 1.94 | |
| GPEC-MW505D | N 688499.6 | E 648740.1 | 49.45 | 52.31 | 107.0 | 10.0 | 117.0 | -57.55 | -62.55 | -67.55 | -- | -- | -- | -- | -- | -- | Damaged |
| MW-2D | N 688812.4 | E 648803.8 | 57.02 | 59.60 | 130.0 | 20.0 | 150.0 | -72.98 | -82.98 | -92.98 | -- | -- | -- | -- | 0.71 | 1.81 | |

**Notes:**
Northing/Eastings in NY State Plane Coordinate System East Zone - NAD 83
NAVD 88 = North American Vertical Datum of 1988, in feet.
ft bgs = Feet below ground surface.
ft. bTOC = Feet below top of well casing (PVC riser).
-- = No measurement taken or data not available.
ND = Not Determined.

**Table 5. DNAPL Monitoring Summary**
**Remedial Investgation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | GPEC-MW01R | | | GPEC-MW205 | | | GPEC-MW103 | GPEC-RW304 | GPEC-RW332 | GPEC-RW409 |
|---|---|---|---|---|---|---|---|---|---|---|
| | DNAPL Thickness (ft.) | | Total DNAPL | DNAPL Thickness (ft.) | | Total DNAPL | | | | |
| Date | Initial | Final | Recovered (gal.) | Initial | Final | Recovered (gal.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) |
| 9/21/2012 | 6.20 | NA | NA | 6.00 | NA | NA | NM | NA | NA | NA |
| 10/4/2012 | 6.22 | NA | NA | 6.56 | NA | NA | NM | NA | NA | NA |
| 10/10/2012 | 6.36 | NA | NA | 7.00 | NA | NA | NM | NA | NA | NA |
| 10/17/2012 | 6.44 | NA | NA | 6.98 | NA | NA | NM | NA | NA | NA |
| 10/24/2012 | 6.19 | NA | NA | 6.66 | NA | NA | NM | NA | NA | NA |
| 11/5/2012 | 5.88 | NA | NA | 6.48 | NA | NA | NM | NA | NA | NA |
| 2/6/2013 | 5.54 | 1.10 | 11.63 | NM | NM | NM | NM | NA | NA | NA |
| 2/7/2013 | 1.05 | NA | NA | 6.40 | 1.65 | 10.58 | NM | NA | NA | NA |
| 2/8/2013 | 1.09 | NA | NA | 1.53 | NA | NA | NM | NA | NA | NA |
| 2/11/2013 | 1.65 | NA | NA | 2.04 | NA | NA | NM | NA | NA | NA |
| 2/13/2013 | 1.44 | NA | NA | 2.15 | NA | NA | NM | NA | NA | NA |
| 2/18/2013 | 1.67 | NA | NA | 1.63 | NA | NA | NM | NA | NA | NA |
| 2/21/2013 | 2.09 | NA | NA | 2.58 | NA | NA | NM | NA | NA | NA |
| 11/24/2015 | 5.62 | NA | NA | 5.23 | NA | NA | -- | NA | NA | NA |
| 12/28/2015 | 4.10 | NA | NA | 5.20 | NA | NA | -- | NA | NA | NA |
| 1/5/2016 | 5.62 | 2.20 | 3.25 | NM | NA | NA | NM | NA | NA | NA |
| 1/6/2016 | 2.23 | NA | NA | 5.20 | 1.10 | 3.50 | NM | NA | NA | NA |
| 1/7/2016 | 2.25 | NA | NA | 1.38 | NA | NA | -- | NA | NA | NA |
| 1/8/2016 | 2.48 | NA | NA | 1.42 | NA | NA | -- | NA | NA | NA |
| 1/14/2016 | 2.80 | NA | NA | 1.80 | NA | NA | -- | NA | NA | NA |
| 1/15/2016 | 2.90 | NA | NA | 1.60 | NA | NA | -- | NA | NA | NA |
| 1/22/2016 | 3.10 | NA | NA | 1.80 | NA | NA | -- | NA | NA | NA |
| 2/2/2016 | 3.50 | NA | NA | 2.30 | NA | NA | -- | NA | NA | NA |
| 2/24/2016 | 5.62 | NA | NA | 2.92 | NA | NA | -- | NA | NA | NA |
| 3/21/2016 | 6.52 | NA | NA | 3.44 | NA | NA | -- | NA | NA | NA |
| 4/25/2016 | 6.97 | NA | NA | 4.65 | NA | NA | -- | NA | NA | NA |
| 5/27/2016 | 6.89 | 2.90 | 4.50 | NM | NA | NA | -- | NA | NA | NA |
| 5/31/2016 | NM | NA | NA | 5.59 | 1.10 | 3.50 | NM | NA | NA | NA |
| 6/1/2016 | 2.96 | NA | NA | 1.04 | NA | NA | -- | NA | NA | NA |
| 6/8/2016 | 3.80 | NA | NA | 1.64 | NA | NA | -- | -- | TRACE | NA |
| 6/15/2016 | 3.96 | NA | NA | 1.70 | NA | NA | -- | -- | -- | NA |
| 7/25/2016 | 6.65 | 2.10 | 4.50 | 2.90 | NA | NA | -- | -- | -- | NA |
| 8/3/2016 | 3.89 | NA | NA | 3.12 | NA | NA | -- | -- | -- | NA |
| 9/8/2016 | 4.90 | NA | NA | 4.00 | NA | NA | -- | -- | -- | NA |
| 9/29/2016 | 6.01 | NA | NA | 4.53 | NA | NA | -- | -- | TRACE | NA |
| 10/6/2016 | 6.18 | 1.10 | 4.0 | 4.90 | NA | NA | -- | -- | -- | NA |
| 10/31/2016 | 3.39 | NA | NA | 5.09 | NA | NA | -- | -- | -- | NA |
| 11/2/2016 | NM | NA | NA | 5.09 | 1.08 | 3.5 | NM | NM | NM | NA |
| 11/30/2016 | 4.40 | NA | NA | 2.05 | NA | NA | -- | -- | -- | NA |
| 12/22/2016 | 6.20 | 1.30 | 3.5 | 2.63 | NA | NA | -- | -- | -- | NA |
| 1/30/2017 | 4.30 | NA | NA | 3.65 | NA | NA | -- | -- | -- | NA |
| 2/20/2017 | 5.45 | 1.60 | 3.5 | 3.85 | NA | NA | -- | -- | -- | NA |
| 3/29/2017 | 5.40 | 0.50 | 2.0 | 4.90 | 0.50 | 2.0 | -- | -- | -- | -- |
| 4/26/2017 | 4.65 | NA | NA | 2.40 | NA | NA | -- | -- | -- | -- |
| 5/22/2017 | 6.80 | 1.00 | 3.0 | 3.05 | NA | NA | -- | -- | -- | -- |
| 6/27/2017 | 3.75 | NA | NA | 4.10 | NA | NA | -- | -- | -- | -- |
| 7/7/2017 | 6.30 | 2.20 | 2.0 | 3.20 | NA | NA | -- | -- | -- | -- |
| 8/24/2017 | 6.80 | 1.70 | 3.0 | 4.10 | 1.20 | 2.5 | -- | -- | -- | -- |
| 9/26/2017 | 4.30 | NA | NA | 1.60 | NA | NA | -- | -- | -- | -- |

**Table 5. DNAPL Monitoring Summary**
**Remedial Investgation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Date | GPEC-MW01R | | | GPEC-MW205 | | | GPEC-MW103 | GPEC-RW304 | GPEC-RW332 | GPEC-RW409 |
|---|---|---|---|---|---|---|---|---|---|---|
| | DNAPL Thickness (ft.) | | Total DNAPL Recovered (gal.) | DNAPL Thickness (ft.) | | Total DNAPL Recovered (gal.) | | | | |
| | Initial | Final | | Initial | Final | | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) |
| 10/30/2017 | 6.30 | 1.10 | 3.0 | 2.10 | NA | NA | -- | -- | -- | -- |
| 11/29/2017 | 3.90 | NA | NA | 3.05 | NA | NA | -- | -- | -- | -- |
| 12/19/2017 | 6.20 | 3.00 | 3.5 | 4.10 | NA | NA | -- | -- | -- | NM |
| 1/30/2018 | 3.30 | NA | NA | 4.70 | NA | NA | -- | -- | -- | NM |
| 2/23/2018 | 5.70 | 1.30 | 3.5 | 5.40 | 1.80 | 2.0 | -- | -- | -- | NM |
| 3/29/2018 | 2.20 | NA | NA | 2.30 | NA | NA | -- | -- | -- | NM |
| 4/19/2018 | 4.10 | NA | NA | 3.60 | NA | NA | -- | -- | -- | NM |
| 5/11/2018 | 5.80 | 1.10 | 5.0 | 4.20 | NA | NA | -- | -- | -- | -- |
| 6/21/2018 | 1.80 | NA | NA | 5.60 | 1.30 | 2.5 | -- | -- | -- | -- |
| 7/23/2018 | 4.10 | NA | NA | 2.00 | NA | NA | -- | -- | -- | -- |
| 8/17/2018 | 5.90 | 0.40 | 6.0 | 2.80 | NA | NA | -- | -- | -- | -- |
| 9/18/2018 | 1.30 | NA | NA | 3.80 | NA | NA | -- | -- | -- | -- |
| 10/10/2018 | 3.30 | NA | NA | 4.30 | NA | NA | -- | -- | -- | -- |
| 11/8/2018 | 4.10 | NA | NA | 5.50 | 0.70 | 3.0 | -- | -- | -- | -- |
| 12/31/2018 | 5.40 | 1.20 | 3.5 | 2.10 | NA | NA | -- | -- | -- | -- |
| 1/21/2019 | 1.90 | NA | NA | 2.50 | NA | NA | -- | -- | -- | -- |
| 3/1/2019 | 3.20 | NA | NA | 3.30 | NA | NA | -- | -- | -- | -- |
| 3/21/2019 | 4.10 | NA | NA | 3.90 | NA | NA | -- | -- | -- | -- |
| 5/2/2019 | 5.90 | 0.60 | 4.0 | 4.40 | NA | NA | -- | -- | -- | -- |
| 5/30/2019 | 1.30 | NA | NA | 5.10 | 0.40 | 5.0 | -- | -- | -- | -- |
| 6/28/2019 | 1.80 | NA | NA | 0.90 | NA | NA | -- | -- | NM | -- |
| 7/25/2019 | 2.50 | NA | NA | 1.20 | NA | NA | -- | -- | NM | -- |
| 8/15/2019 | 3.20 | -- | -- | 1.70 | -- | -- | -- | -- | -- | -- |
| 9/10/2019 | 4.63 | -- | -- | 2.20 | -- | -- | -- | -- | -- | -- |
| 10/14/2019 | 5.10 | 0.80 | 4.0 | 2.90 | -- | -- | -- | -- | -- | -- |
| 11/4/2019 | 1.50 | -- | -- | 3.20 | -- | -- | -- | -- | -- | -- |
| 12/10/2019 | 3.00 | -- | -- | 3.70 | -- | -- | -- | -- | -- | -- |
| 1/21/2020 | 3.70 | -- | -- | 4.10 | -- | -- | -- | -- | -- | -- |
| 2/5/2020 | 4.30 | 0.50 | 4.0 | 4.20 | -- | -- | -- | -- | -- | -- |
| 3/25/2020 | 3.20 | 0.30 | 3.0 | 4.60 | 0.40 | 4.0 | -- | -- | -- | -- |
| 5/19/2020 | 4.10 | -- | -- | 2.10 | -- | -- | -- | -- | -- | -- |
| 5/29/2020 | 4.20 | 0.30 | 3.0 | NM | -- | -- | -- | -- | -- | -- |
| 6/22/2020 | 1.62 | -- | -- | 2.25 | -- | -- | -- | -- | -- | -- |
| 7/1/2020 | 1.70 | -- | -- | 2.25 | 0.50 | 2.00 | -- | -- | -- | -- |
| 7/27/2020 | 3.91 | -- | -- | 0.61 | -- | -- | -- | -- | -- | -- |
| 7/29/2020 | 3.94 | 0.24 | 2.50 | NM | -- | -- | -- | -- | -- | -- |
| 8/24/2020 | 1.87 | -- | -- | 0.93 | -- | -- | -- | -- | -- | -- |
| 8/28/2020 | 2.12 | 0.08 | 2.04 | -- | -- | -- | -- | -- | -- | -- |
| 9/25/2020 | 1.53 | 0.12 | 1.41 | 1.45 | 0.17 | 1.28 | -- | -- | -- | -- |
| 10/28/2020 | 2.07 | 0.06 | 1.31 | 0.82 | -- | -- | -- | -- | -- | -- |
| 11/25/2020 | 2.31 | 0.00 | 1.51 | 1.26 | -- | -- | -- | -- | -- | -- |
| 12/29/2020 | 1.81 | 0.00 | 1.18 | 1.68 | 0.00 | 1.10 | -- | -- | -- | -- |
| 1/27/2021 | 1.82 | 0.00 | 1.19 | 0.78 | -- | -- | -- | -- | -- | -- |
| 2/23/2021 | 1.42 | 0.00 | 0.93 | NM | -- | -- | -- | -- | -- | -- |
| 3/3/2021 | NM | -- | -- | 1.33 | -- | -- | -- | -- | -- | -- |
| 3/31/2021 | 2.41 | 0.00 | 1.50 | 1.93 | 0.00 | 1.25 | -- | -- | -- | -- |
| 4/30/2021 | 2.10 | 1.10 | 1.00 | 0.70 | -- | -- | -- | -- | -- | -- |
| 5/28/2021 | 3.82 | -- | -- | 1.14 | -- | -- | -- | -- | -- | -- |
| 6/1/2021 | 3.89 | 0.00 | 2.54 | -- | -- | -- | -- | -- | -- | -- |
| 6/21/2021 | 1.10 | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| 7/6/2021 | 2.97 | 0.00 | 2.25 | 1.22 | -- | -- | -- | -- | -- | -- |

**Table 5. DNAPL Monitoring Summary**
**Remedial Investgation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | GPEC-MW01R | | | GPEC-MW205 | | | GPEC-MW103 | GPEC-RW304 | GPEC-RW332 | GPEC-RW409 |
|---|---|---|---|---|---|---|---|---|---|---|
| | DNAPL Thickness (ft.) | | Total DNAPL | DNAPL Thickness (ft.) | | Total DNAPL | | | | |
| Date | Initial | Final | Recovered (gal.) | Initial | Final | Recovered (gal.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) |
| 7/28/2021 | 3.88 | -- | -- | 1.85 | -- | -- | -- | -- | -- | -- |
| 7/30/2021 | 3.88 | 0.11 | 2.50 | 1.89 | 0.30 | 2.25 | -- | -- | -- | -- |
| 8/17/2021 | 2.89 | -- | -- | 1.04 | -- | -- | -- | -- | -- | -- |
| 8/19/2021 | 2.91 | 0.08 | 1.85 | 1.04 | -- | -- | -- | -- | -- | -- |
| 9/17/2021 | 2.12 | 0.00 | 1.38 | 2.81 | 0.00 | 1.83 | -- | -- | -- | -- |
| 10/28/2021 | 2.93 | 0.00 | 1.91 | 0.86 | -- | -- | -- | -- | -- | -- |
| 11/30/2021 | 2.84 | 0.00 | 1.87 | 1.32 | -- | -- | -- | -- | -- | -- |
| 12/28/2021 | 3.82 | 0.00 | 2.49 | 1.88 | 0.12 | 1.15 | -- | -- | -- | -- |
| 1/31/2022 | 1.84 | 0.00 | 1.20 | 1.07 | -- | -- | -- | -- | -- | -- |
| 2/25/2022 | 1.77 | 0.00 | 1.16 | 1.35 | -- | -- | -- | -- | -- | -- |
| 3/31/2022 | 2.54 | -- | -- | 1.76 | -- | -- | -- | -- | -- | -- |
| 4/4/2022 | 2.56 | 0.00 | 1.66 | 1.82 | 0.05 | 1.16 | -- | -- | -- | -- |
| 4/25/2022 | 1.39 | -- | -- | 0.81 | -- | -- | -- | -- | Blebs | -- |
| 4/26/2022 | 1.41 | 0.00 | 0.92 | -- | -- | -- | -- | -- | -- | -- |
| 5/27/2022 | 1.91 | 0.00 | 1.25 | 1.09 | -- | -- | -- | -- | -- | -- |
| 6/23/2022 | 1.81 | 0.08 | 1.12 | 1.35 | -- | -- | -- | -- | -- | -- |
| 7/28/2022 | 2.11 | 0.02 | 1.36 | 1.98 | 0.52 | 0.95 | -- | -- | -- | -- |
| 8/30/2022 | 2.14 | 0.04 | 1.37 | 1.04 | -- | -- | -- | -- | -- | -- |
| 10/3/2022 | 1.93 | 0.00 | 1.26 | 1.68 | 0.04 | 1.07 | -- | -- | -- | -- |
| 10/25/2022 | 1.46 | 0.00 | 0.95 | 0.63 | -- | -- | -- | -- | -- | -- |
| 12/2/2022 | 2.10 | 0.00 | 1.37 | 1.08 | -- | -- | -- | -- | -- | -- |
| 12/29/2022 | 1.73 | 0.00 | 1.13 | 1.54 | 0.00 | 1.01 | -- | -- | -- | -- |
| 1/30/2023 | 1.58 | 0.00 | 1.03 | 0.70 | -- | -- | -- | -- | -- | -- |
| 3/7/2023 | 2.15 | 0.00 | 1.40 | 1.12 | -- | -- | -- | -- | -- | -- |
| 3/31/2023 | 1.48 | 0.00 | 0.97 | 1.40 | -- | -- | -- | -- | -- | -- |
| 5/17/2023 | 2.74 | -- | -- | 2.62 | -- | -- | -- | -- | -- | -- |
| 6/5/2023 | 3.70 | 0.00 | 3.00 | 3.20 | 0.00 | 1.75 | -- | -- | -- | -- |
| 7/10/2023 | 1.40 | -- | -- | 0.10 | -- | -- | -- | -- | -- | -- |
| 7/27/2023 | 2.75 | -- | -- | 3.30 | -- | -- | -- | -- | -- | -- |
| 8/1/2023 | 3.20 | 0.00 | 2.09 | 3.40 | 0.00 | 2.22 | -- | -- | -- | -- |
| 9/20/2023 | 2.14 | 0.00 | 1.75 | 1.26 | 0.00 | 0.70 | -- | -- | -- | -- |
| 10/11/2023 | 3.27 | -- | -- | 0.77 | -- | -- | -- | -- | -- | -- |
| 10/20/2023 | 3.22 | 0.00 | 2.10 | -- | -- | -- | -- | -- | -- | -- |
| 11/14/2023 | 1.65 | 0.00 | 1.08 | 1.35 | -- | -- | -- | -- | -- | -- |
| 12/28/2023 | 2.32 | 0.87 | 0.95 | 2.57 | 1.16 | 0.92 | -- | -- | -- | -- |
| 1/25/2024 | 2.55 | -- | -- | 2.42 | -- | -- | -- | -- | -- | -- |
| 2/22/2024 | 2.85 | 0.10 | 1.80 | 2.36 | 0.00 | 1.54 | -- | -- | -- | -- |
| 4/2/2024 | 3.70 | 0.00 | 2.42 | 0.80 | -- | -- | -- | -- | -- | -- |
| 4/26/2024 | 1.60 | 0.00 | 1.04 | 1.14 | -- | -- | | | | |
| 6/7/2024 | 2.42 | 0.00 | 1.80 | 2.53 | 0.00 | 1.90 | | | | |
| 7/5/2024 | 1.45 | 0.00 | 0.90 | 0.65 | -- | -- | -- | -- | -- | -- |
| 8/5/2024 | 1.63 | 0.00 | 1.06 | 0.87 | -- | -- | -- | -- | -- | -- |
| 9/6/2024 | 1.7 | -- | -- | 1.56 | -- | -- | -- | -- | -- | -- |
| 9/27/2024 | 2.67 | 0.00 | 1.74 | 2.41 | 0.00 | 1.57 | -- | -- | -- | -- |
| 11/7/2024 | 2.46 | 0.00 | 1.61 | 0.93 | -- | -- | -- | -- | -- | -- |
| 12/9/2024 | 1.78 | 0.00 | 1.16 | 1.22 | -- | -- | -- | -- | -- | -- |
| 12/27/2024 | 1.32 | 0.00 | 0.86 | 1.44 | -- | -- | -- | -- | -- | -- |
| 1/29/2025 | 1.57 | 0.00 | 1.03 | 2.23 | 0.00 | 1.38 | -- | -- | -- | -- |
| 3/6/2025 | 1.8 | 0 | 1.1754 | 0.87 | -- | -- | -- | -- | -- | -- |
| 3/26/2025 | 0.98 | 0 | 0.63994 | NM | -- | -- | -- | -- | -- | -- |
| 4/11/2025 | -- | -- | -- | 1.75 | -- | -- | -- | -- | -- | -- |
| 5/6/2025 | -- | -- | -- | 2.35 | -- | -- | -- | -- | -- | -- |
| 5/12/2025 | 3.05 | 0 | 2.5 | -- | -- | -- | -- | -- | -- | -- |

**Table 5. DNAPL Monitoring Summary**
**Remedial Investgation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Date | GPEC-MW01R | | | GPEC-MW205 | | | GPEC-MW103 | GPEC-RW304 | GPEC-RW332 | GPEC-RW409 |
|---|---|---|---|---|---|---|---|---|---|---|
| | DNAPL Thickness (ft.) | | Total DNAPL Recovered (gal.) | DNAPL Thickness (ft.) | | Total DNAPL Recovered (gal.) | | | | |
| | Initial | Final | | Initial | Final | | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) | DNAPL Thickness (ft.) |
| 5/19/2025 | -- | -- | -- | 2.8 | 0.02 | 2.55 | | | | |
| 5/30/2025 | 2.94 | 0 | 2.06 | -- | -- | -- | -- | -- | -- | -- |
| 7/3/2025 | 1.37 | 0 | 0.89 | 0.77 | -- | -- | | | -- | -- |
| 7/31/2025 | 1.91 | 0 | 1.25 | 1.92 | 0 | | -- | -- | -- | -- |
| 8/25/2025 | 1.1 | 0 | 0.72 | -- | -- | -- | -- | -- | -- | -- |
| 9/5/2025 | -- | -- | -- | 0.81 | -- | -- | -- | -- | -- | -- |
| 9/30/2025 | 1.45 | 0 | 0.95 | -- | -- | -- | -- | | -- | -- |
| 10/6/2025 | -- | -- | -- | 1.89 | -- | -- | -- | -- | -- | -- |
| 10/21/2025 | 1.85 | 0.1 | 1.3 | 2.2 | -- | -- | -- | -- | -- | -- |
| 10/24/2025 | -- | -- | -- | 2.32 | 0.12 | 1.51 | -- | -- | -- | -- |
| 11/19/2025 | -- | -- | -- | 2.17 | 0.1 | 1.32 | -- | -- | -- | -- |
| 11/24/2025 | 1.77' | 0.1 | 1.15 | -- | -- | -- | -- | -- | -- | -- |

**Notes:**
NM = Not measured
NA = Not Applicable
-- = No DNAPL observed in well

**Table 6. Estimated Hydraulic Condictivity**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Well ID | Screen Depth (ft. bgs) | Screened Zone | Screened Formation | Depth to Water (ft.) | Depth to Well Bottom (ft.) | Estimated Hydraulic Conductivity | | | | Average $K_H$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Rising 1 | Rising 2 | Falling 1 | Falling 2 | |
| GPE-MW-2S | 2 - 12 | Shallow - Water Table | Sand/Silty Sand | 4.17 | 11.95 | 19 | 27 | NA | NA | 23 |
| GPE-MW-4D | 30 - 40 | Intermediate | Sand/Silty Sand | 4.70 | 43.83 | 0.11 | NT | 0.17 | 0.17 | 0.15 |
| GPEC-GT-3 | 2 - 17 | Shallow - Water Table | Fill/Silt | 7.35 | 22.36 | 0.024 | NT | NA | NA | 0.024 |
| GPEC-GT-4S | 3 - 18 | Shallow - Water Table | Fill/Sand | 7.45 | 19.40 | 5.1 | 6.9 | NA | NA | 6.0 |
| GPEC-GT-4D | 54 - 69 | Intermediate | Sand | 8.10 | 71.00 | 53 | 50 | 54 | NT | 52.3 |
| GPEC-GT-10D | 43 - 58 | Intermediate | Sand | 7.70 | 58.96 | 9 | 13 | 6.7 | 7.2 | 9.0 |
| GPEC-MW-2 | 20 - 35 | Shallow | Sand and Gravel | 5.50 | 38.00 | 0.65 | 0.67 | 1.1 | 1 | 0.86 |
| GPEC-MW-3S | 25 - 40 | Intermediate | Silt and Gravel | 4.40 | 41.00 | 3.2 | 2.8 | 5.2 | 5.6 | 4.2 |
| GPEC-MW-5S | 28 - 38 | Intermediate | Silty Sand | 7.50 | 43.28 | 15 | 18 | 19 | 15 | 16.8 |
| GPEC-MW-9 | 10 - 25 | Shallow - Water Table | Sand and Gravel | 14.43 | 26.32 | 230 | 120 | NA | NA | 175 |
| GPEC-MW103 | 50 - 60 | Intermediate | Sand and Gravel | 6.55 | 59.00 | 25 | 24 | 25 | 33 | 26.8 |
| GPEC-MW222S | 2 - 12 | Shallow - Water Table | Fill w/ Sand and Silt | 5.47 | 12.34 | 7.8 | 7.7 | NA | NA | 7.8 |
| GPEC-MW328I | 30 - 40 | Intermediate | Silt | 10.35 | 37.90 | 7.50E-03 | NT | 6.90E-03 | NT | 7.20E-03 |
| GPEC-MW-333I | 30 - 40 | Intermediate | Sand | 12.12 | 37.61 | 2.2 | 4.6 | 7.5 | 6 | 5.1 |

**Notes:**

$K_H$ = Hydraulic conductivity (horizontal) in units of feet per day.

ft. bgs = feet below ground surface.

NA = not applicable; falling head tests not performed on wells screened across water table.

Calculation method: Bouwer-Rice (wells screened across water table); Hvorslev (all others).

Depth to water measured from top of PVC riser.

GPE-MW-2S and GPEC-MW-3S: potential tidal effects apparent; later-time data not used in hydraulic conductivity estimate.

NT = indicated test not performed.

**Table 7. Summary of Calculated Horizontal Hydraulic Aquifer Properties**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

**Horizontal Groundwater Velocity**

| Well Location | 2015 Groundwater Elevation (ft msl) | 2024 Groundwater Elevation (ft msl) | Horizontal Distance (ft) | 2015 Calculated Hydraulic Gradient, I (ft/ft) | 2024 Calculated Hydraulic Gradient, I (ft/ft) | Hydraulic Conductivity, K (ft/day) | 2015 Groundwater Velocity, v (ft/day) | 2024 Groundwater Velocity, v (ft/day) |
|---|---|---|---|---|---|---|---|---|
| **Upper Glacial Aquifer - Shallow Zone** | | | | | | | | |
| GPEC-MW344S | 7.96 | 7.47 | 1098.75 | 0.001 | 0.00180 | 7.50 | 0.04 | 0.05 |
| GPEC-MW221S | 6.36 | 5.49 | | | | | | |
| MW-5 | 2.13 | 2.17 | 363.1 | 0.0004 | 0.00044 | | 0.01 | 0.01 |
| MW-3 | 1.98 | 2.01 | | | | | | |
| GPEC-PZ322 | 2.11 | 1.85 | 293.4 | 0.0002 | 0.00037 | | 0.01 | 0.01 |
| W-2 | 2.04 | 1.74 | | | | | | |
| | | | **Average Across Site** | 0.001 | 0.001 | | 0.02 | 0.02 |
| | | | | | | | | |
| **Upper Glacial Aquifer - Intermediate Zone** | | | | | | | | |
| GPEC-MW11 | 2.30 | 0.55 | 1212.0 | 0.000 | -0.001 | 14.28 | 0.03 | -0.09 |
| GPEC-MW103 | 1.81 | 2.01 | | | | | | |
| GPEC-MW221I | 2.25 | 2.22 | 568.33 | 0.001 | 0.002 | | 0.08 | 0.11 |
| GPEC-MW328I | 1.60 | 1.31 | | | | | | |
| | | | **Average Across Site** | 0.001 | 0.000 | | 0.06 | 0.01 |
| | | | | | | | | |
| **Upper Glacial Aquifer - Deep Zone** | | | | | | | | |
| GPEC-MW339D | 2.57 | 2.59 | 953.1 | 2.94E-04 | 3.46E-04 | -- | -- | -- |
| GPEC-MW221D | 2.29 | 2.26 | | | | | | |
| GPEC-MW221D | 2.29 | 2.26 | 1245.1 | 3.29E-04 | 6.02E-04 | | -- | -- |
| GPEC-MW101D | 1.88 | 1.51 | | | | | | |
| | | | **Average Across Site** | 3.12E-04 | 4.74E-04 | | -- | -- |

**Notes:**
ft - feet
ft/ft - feet per foot
ft/day - feet per day
ft msl - feet mean sea level

**Table 8. Summary of Calculated Vertical Hydraulic Gradients**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Well ID | RI (2015) Groundwater Elevation (NAVD 88) | SRI (2024) Groundwater Elevation (NAVD 88) | Vertical Distance (ft) | RI (2015) Calculated Hydraulic Gradient (ft/ft) | SRI (2024) Calculated Hydraulic Gradient (ft/ft) |
|---|---|---|---|---|---|
| **Shallow to Intermediate Upper Glacier Aquifer Zone** | | | | | |
| GPEC-GT-4S | 4.84 | 3.43 | 51.00 | 0.057 | 0.029 |
| GPEC-GT-4D | 1.93 | 1.95 | | | |
| GPEC-MW-101WT | 2.02 | 1.73 | 57.00 | 0.000 | -0.001 |
| GPEC-MW-101I | 2.00 | 1.80 | | | |
| GPEC-MW217S | 12.60 | 8.56 | 26.00 | 0.402 | 0.251 |
| GPEC-MW217I | 2.15 | 2.03 | | | |
| GPEC-MW221S | 6.36 | 5.49 | 37.00 | 0.111 | 0.088 |
| GPEC-MW221I | 2.25 | 2.22 | | | |
| GPEC-MW339S | 6.71 | 5.65 | 27.00 | 0.154 | 0.111 |
| GPEC-MW339I | 2.57 | 2.65 | | | |
| GPEC-MW344S | 7.96 | 7.47 | 22.00 | 0.258 | 0.230 |
| GPEC-MW344I | 2.28 | 2.42 | | | |
| GPEC-MW-3S | 1.50 | 1.74 | 65.00 | -0.008 | -0.003 |
| GPEC-MW-3D | 2.01 | 1.93 | | | |
| GPEC-MW-5S | 2.11 | 1.90 | 39.50 | -0.001 | -0.020 |
| GPEC-MW-5D | 2.16 | 2.70 | | | |
| GPE-MW-2S | 3.53 | 2.55 | 19.05 | 0.008 | 0.006 |
| GPE-MW-2D | 3.38 | 2.43 | | | |
| GPE-MW-4S | 3.12 | 2.41 | 29.39 | 0.008 | 0.002 |
| GPE-MW-4D | 2.88 | 2.36 | | | |
| | | | **Average** | 0.099 | 0.069 |
| **Intermediate to Deep Upper Glacier Aquifer Zone** | | | | | |
| GPEC-MW-101I | 2.00 | 1.80 | 34.50 | 0.004 | 0.008 |
| GPEC-MW-101D | 1.88 | 1.51 | | | |
| GPEC-MW-11 | 2.30 | 0.55 | 44.50 | 0.001 | 0.032 |
| GPEC-MW-11D | 2.24 | -0.89 | | | |
| GPEC-MW217I | 2.15 | 2.03 | 35.00 | 0.000 | 0.005 |
| GPEC-MW217D | 2.16 | 1.85 | | | |
| GPEC-MW220I | 2.41 | 2.54 | 30.00 | -0.001 | -0.002 |
| GPEC-MW220D | 2.44 | 2.60 | | | |
| GPEC-MW221I | 2.25 | 2.22 | 35.00 | -0.001 | -0.001 |
| GPEC-MW221D | 2.29 | 2.26 | | | |
| GPEC-MW222S | 8.49 | 6.99 | 68.00 | 0.088 | 0.065 |
| GPEC-MW222D | 2.49 | 2.56 | | | |
| GPEC-MW306I | 2.02 | 1.73 | 35.00 | 0.000 | -0.003 |
| GPEC-MW306D | 2.01 | 1.82 | | | |
| GPEC-MW328I | 1.60 | 1.31 | 33.00 | -0.016 | -0.024 |
| GPEC-MW328D | 2.12 | 2.10 | | | |
| GPEC-MW339I | 2.57 | 2.65 | 26.00 | 0.000 | 0.002 |
| GPEC-MW339D | 2.57 | 2.59 | | | |
| GPEC-MW344I | 2.28 | 2.42 | 35.00 | -0.014 | -0.019 |
| GPEC-MW344D | 2.77 | 3.09 | | | |
| | | | **Average** | 0.006 | 0.006 |

**Notes:**

D = well screened across deep Upper Glacial, I = Intermediate Upper Glacial,
S = Shallow Upper Glacial (including Fill subunit).

NAVD 88 = North American Vertical Datum of 1988, in feet.

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 2 | Area 2 | Area 2 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS303 | GPEC-SS304 | GPEC-SS304 | GPEC-SS305 | GPEC-SS306 |
| | | | | Sample Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS999 | GPEC-SS304 | GPEC-SSXXX | GPEC-SS305 | GPEC-SS306 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/14/2018 | 8/12/2014 | 8/12/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 |
| | | | | Parent Sample | | | | | GPEC-SS303 | | GPEC-SS 304 | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 0.05 | 4.8 | 89 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Toluene | 108-88-3 | 0.7 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Ethylbenzene | 100-41-4 | 1 | 41 | 780 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| m,p-Xylene | 108383/106423 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1.6 | 100 | 1000 | NA | NA | NA | 0.01 U | 0.01 U | 0.011 UJ | 0.011 UJ | 0.012 UJ | 0.011 UJ |
| Total BTEX | TBTEX | NE | NE | NE | NA | NA | NA | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 0.05 | 100 | 1000 | NA | NA | NA | 0.026 U | 0.026 U | 0.027 UJ | 0.027 UJ | 0.031 UJ | 0.027 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | NE | NA | NA | NA | 0.104 U | 0.104 U | 0.11 R | 0.109 R | 0.124 R | 0.108 R |
| Acrylonitrile | 107-13-1 | NE | NE | NE | NA | NA | NA | 0.104 U | 0.104 U | 0.11 UJ | 0.109 UJ | 0.124 UJ | 0.108 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Bromoform | 75-25-2 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Bromomethane | 74-83-9 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 0.3 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NE | NA | NA | NA | 0.021 U | 0.021 U | 0.022 UJ | 0.022 UJ | 0.025 UJ | 0.022 UJ |
| Carbon disulfide | 75-15-0 | 2.7 | 100 | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Carbon tetrachloride | 56-23-5 | 0.76 | 2.4 | 44 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Chlorobenzene | 108-90-7 | 1.1 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Chloroethane | 75-00-3 | 1.9 | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Chloroform | 67-66-3 | 0.37 | 49 | 700 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Chloromethane | 74-87-3 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,1-Dichloroethane | 75-34-3 | 0.27 | 26 | 480 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,2-Dichloroethane | 107-06-2 | 0.02 | 3.1 | 60 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 0.25 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 0.19 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 2 | Area 2 | Area 2 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS303 | GPEC-SS304 | GPEC-SS304 | GPEC-SS305 | GPEC-SS306 |
| | | | | Sample Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS999 | GPEC-SS304 | GPEC-SSXXX | GPEC-SS305 | GPEC-SS306 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/14/2018 | 8/12/2014 | 8/12/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 |
| | | | | Parent Sample | | | | | GPEC-SS303 | | GPEC-SS 304 | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.33 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,2-Dichloropropane | 78-87-5 | 0.33 | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 0.93 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | 1 | 1 | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Methylene chloride | 75-09-2 | 0.05 | 100 | 1000 | NA | NA | NA | 0.01 U | 0.01 U | 0.011 UJ | 0.011 UJ | 0.012 UJ | 0.011 UJ |
| Styrene | 100-42-5 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.6 | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Tetrachloroethene | 127-18-4 | 1.3 | 19 | 300 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | 6 | 100 | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.4 | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 0.68 | 100 | 1000 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Trichloroethene | 79-01-6 | 0.47 | 21 | 400 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | 0.34 | 80 | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | NE | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Vinyl chloride | 75-01-4 | 0.02 | 0.9 | 27 | NA | NA | NA | 0.0052 U | 0.00522 U | 0.00548 UJ | 0.00544 UJ | 0.00619 UJ | 0.00541 UJ |
| Total VOCs | TVOC | NE | NE | NE | NA | NA | NA | ND | ND | ND | ND | ND | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 98 | 100 | 1000 | 0.038 U | **0.196** | 0.038 U | **0.251** | **0.192** | **0.176** | **0.203** | **0.087** | **0.093** |
| Acenaphthylene | 208-96-8 | 107 | 100 | 1000 | **0.165** | **1.47** | **0.039** | **0.1** | **0.098** | **1.06 J** | **1.65** | **0.406** | **0.206** |
| Anthracene | 120-12-7 | 1000 | 100 | 1000 | **0.143** | **4.47** | **0.037 J** | **1.37** | **0.535** | **1.21 J** | **2.14 J** | **0.656** | **0.461** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 100 | 1000 | **0.397** | **1.1** | **0.089** | **1.34** | **0.506** | **2.53 J** | **2.21** | **0.889** | **0.858** |
| Fluoranthene | 206-44-0 | 1000 | 100 | 1000 | **0.901** | **16.6 D** | **0.111** | **13 D** | **3.55** | **3.91 J** | **6.48** | **2.36** | **2.92** |
| Fluorene | 86-73-7 | 386 | 100 | 1000 | **0.044** | **1.8** | 0.038 U | **0.245** | **0.165** | **0.324** | **0.327** | **0.068** | **0.102** |
| 2-Methylnaphthalene | 91-57-6 | 36.4 | NE | NE | **0.031 J** | **0.225** | 0.038 U | **0.088** | **0.061** | **0.128** | **0.219** | **0.061** | **0.052** |
| Naphthalene | 91-20-3 | 12 | 100 | 1000 | **0.075** | **0.46** | 0.038 U | **0.129** | **0.122** | **0.241** | **0.351** | **0.084** | **0.108** |
| Phenanthrene | 85-01-8 | 1000 | 100 | 1000 | **0.358** | **14.5 D** | **0.043** | **4.38 D** | **2.1** | **2.08 J** | **3.64 J** | **1.05** | **1.26** |
| Pyrene | 129-00-0 | 1000 | 100 | 1000 | **0.836** | **15.6 D** | **0.098** | **19.7 D** | **3.28** | **4.37 J** | **7.36 J** | **1.89** | **2.32** |
| Benz[a]anthracene | 56-55-3 | 1 | 1 | 11 | **0.524** | **9.88 D** | **0.068** | **7.72 D** | **2.08** | **2.46 J** | **3.68** | **1.26** | **1.48** |
| Benzo[a]pyrene | 50-32-8 | 22 | 1 | 1.1 | **0.513** | **5.59** | **0.075** | **6.06 D** | **1.95** | **4.2 J** | **6.13** | **2.27** | **2.41** |
| Benzo[b]fluoranthene | 205-99-2 | 1.7 | 1 | 11 | **0.547** | **7.94 D** | **0.103** | **5.72 D** | **1.94** | **4.1 J** | **5.95** | **2.31** | **2.57** |
| Benzo[k]fluoranthene | 207-08-9 | 1.7 | 3.9 | 110 | **0.531** | **4.74** | **0.071** | **3.84** | **1.69** | **3.04 J** | **4.49** | **1.65** | **1.85** |
| Chrysene | 218-01-9 | 1 | 3.9 | 110 | **0.574** | **9.02 D** | **0.081** | **8.27 D** | **2.14** | **2.7 J** | **4.52** | **1.36** | **1.53** |
| Dibenz[a,h]anthracene | 53-70-3 | 1000 | 0.33 | 1.1 | **0.112** | **0.688** | 0.038 U | **0.757** | **0.245** | **0.668 J** | **1.08** | **0.377** | **0.331** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 8.2 | 0.5 | 11 | **0.246** | **1.44** | **0.061** | **1.59** | **0.597** | **2.28 J** | **2.49** | **0.882** | **0.846** |
| Total PAHs | TPAH | NE | NE | NE | **5.997** | **95.719** | **0.876** | **74.56** | **21.251** | **35.477** | **52.92** | **17.66** | **19.397** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Area | Area 2 | Area 2 | Area 2 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | | Location Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS303 | GPEC-SS304 | GPEC-SS304 | GPEC-SS305 | GPEC-SS306 |
| | | | | | Sample Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS999 | GPEC-SS304 | GPEC-SSXXX | GPEC-SS305 | GPEC-SS306 |
| | | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/14/2018 | 8/12/2014 | 8/12/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 |
| | | | | | Parent Sample | | | | | GPEC-SS303 | | GPEC-SS 304 | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | | |
| Aniline | 62-53-3 | 0.33 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Benzidine | 92-87-5 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 1.1 U | 1.38 U | 0.396 U | 0.346 U | |
| Benzoic acid | 65-85-0 | 2.7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Benzyl alcohol | 100-51-6 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 435 | NE | NE | **0.104** | **0.112** | 0.038 U | **0.499** | **0.172** | **0.562** | **0.565** | **0.632** | **0.517** | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Butyl benzyl phthalate | 85-68-7 | 122 | NE | NE | 0.038 U | **0.095** | 0.038 U | 0.033 U | 0.034 U | **0.16** | **0.251** | **0.181** | 0.035 U | |
| Carbazole | 86-74-8 | NE | NE | NE | **0.031 J** | **1.04** | 0.038 U | **0.278** | **0.203** | **0.136** | **0.224** | **0.12** | **0.093** | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 4-Chloroaniline | 106-47-8 | 0.22 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Dibenzofuran | 132-64-9 | 6.2 | 59 | 1000 | 0.038 U | **0.853** | 0.038 U | **0.169** | **0.102** | **0.091 J** | 0.138 U | **0.049** | **0.052** | |
| 1,2-Dichlorobenzene | 95-50-1 | 1.1 | 100 | 1000 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 2.4 | 49 | 560 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 1.8 | 13 | 250 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 UJ | 0.138 U | 0.04 U | 0.035 U | |
| 2,4-Dichlorophenol | 120-83-2 | 0.4 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Diethyl phthalate | 84-66-2 | 7.7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Dimethyl phthalate | 131-11-3 | 27 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Di-n-butyl phthalate | 84-74-2 | 8.1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | **0.07 J** | **0.111 J** | **0.151** | **0.037** | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 1.1 U | 1.38 U | 0.396 U | 0.346 U | |
| 2,4-Dinitrophenol | 51-28-5 | 0.2 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 1.1 U | 1.38 U | 0.396 U | 0.346 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 2,6-Dinitrotoluene | 606-20-2 | 0.17 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Di-n-octyl phthalate | 117-84-0 | 120 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Hexachlorobenzene | 118-74-1 | 1.4 | 1.2 | 12 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Hexachlorobutadiene (C-46) | 87-68-3 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Hexachloroethane | 67-72-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| Isophorone | 78-59-1 | 4.4 | NE | NE | 0.038 U | 0.037 U | **0.108** | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 0.33 | 100 | 1000 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 0.33 | 100 | 1000 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U | |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 2 | Area 2 | Area 2 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS303 | GPEC-SS304 | GPEC-SS304 | GPEC-SS305 | GPEC-SS306 |
| | | | | Sample Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS999 | GPEC-SS304 | GPEC-SSXXX | GPEC-SS305 | GPEC-SS306 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/14/2018 | 8/12/2014 | 8/12/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 |
| | | | | Parent Sample | | | | | GPEC-SS303 | | GPEC-SS 304 | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 0.4 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 3-Nitroaniline | 99-09-2 | 0.5 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| Nitrobenzene | 98-95-3 | 0.17 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 2-Nitrophenol | 88-75-5 | 0.3 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 4-Nitrophenol | 100-02-7 | 0.1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| N-Nitrosodimethylamine (NDMA) | 62-75-9 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| N-Nitrosodi-n-propylamine (NDPA) | 621-64-7 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| N-Nitrosodiphenylamine (NDFA) | 86-30-6 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| Pentachlorophenol | 87-86-5 | 0.8 | 6.7 | 55 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| Phenol | 108-95-2 | 0.33 | 100 | 1000 | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| Pyridine | 110-86-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.033 U | 0.034 U | 0.11 U | 0.138 U | 0.04 U | 0.035 U |
| Total SVOCs | TSVOC | NE | NE | NE | **6.132** | **97.819** | **0.984** | **75.506** | **21.728** | **36.496** | **54.071** | **18.793** | **20.096** |
| **PCB Aroclors (mg/kg)** | | NE | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | NE | 0.066 U | 0.065 U | 0.07 U | 0.02 U | 0.02 U | 0.042 U | 0.043 U | **0.379 J** | 0.041 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 3.2 | 1 | 25 | ND | ND | ND | 0.02 U | 0.02 U | 0.042 U | 0.043 U | **0.379 J** | 0.041 U |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.19 | 0.097 | 1.4 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| alpha-BHC (Hexachlorocyclohexane) | 319-84-6 | 0.02 | 0.48 | 6.8 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| beta-BHC (beta-Hexachlorocyclohexane) | 319-85-7 | 0.09 | 0.36 | 14 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane) | 58-89-9 | 0.1 | 1.3 | 23 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| delta-BHC (delta-Hexachlorocyclohexane) | 319-86-8 | 0.25 | 100 | 1000 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NE | 0.055 U | 0.054 U | **0.109** | **0.062** | **0.043 J** | 0.53 U | 0.542 U | 0.6 U | 0.513 U |
| alpha-Chlordane | 5103-71-9 | 2.9 | 4.2 | 47 | 0.00443 U | 0.00434 U | **0.017** | **0.00326 J** | **0.00261 J** | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| gamma-Chlordane | 5103-74-2 | 14 | NE | NE | 0.00443 U | 0.00434 U | **0.00821** | **0.00537** | **0.00439** | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| 4,4-DDD (p,p-DDD) | 72-54-8 | 14 | 13 | 180 | 0.00443 U | 0.00434 U | 0.00464 U | **0.0059** | **0.00554** | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| 4,4'-DDE (p,p'-DDE) | 72-55-9 | 17 | 8.9 | 120 | 0.00443 U | 0.00434 U | 0.00464 U | **0.023** | **0.026** | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| 4,4'-DDT (p,p'-DDT) | 50-29-3 | 136 | 7.9 | 94 | **0.00571** | **0.018** | 0.00464 U | **0.029** | **0.028** | 0.042 U | 0.043 U | 0.048 U | **0.026 J** |
| Dieldrin | 60-57-1 | 0.1 | 0.2 | 2.8 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| alpha-Endosulfan (I) | 959-98-8 | 102 | 24 | 920 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 2 | Area 2 | Area 2 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS303 | GPEC-SS304 | GPEC-SS304 | GPEC-SS305 | GPEC-SS306 |
| | | | | Sample Name | GPEC-SS300 | GPEC-SS301 | GPEC-SS302 | GPEC-SS303 | GPEC-SS999 | GPEC-SS304 | GPEC-SSXXX | GPEC-SS305 | GPEC-SS306 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/14/2018 | 8/12/2014 | 8/12/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 | 8/5/2014 |
| | | | | Parent Sample | | | | | GPEC-SS303 | | GPEC-SS 304 | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| beta-Endosulfan (II) | 33213-65-9 | 102 | 24 | 920 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Endosulfan sulfate | 1031-07-8 | 1000 | 24 | 920 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Endrin | 72-20-8 | 0.06 | 11 | 410 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NE | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Endrin ketone | 53494-70-5 | NE | NE | NE | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Heptachlor | 76-44-8 | 0.38 | 2.1 | 29 | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Heptachlor epoxide | 1024-57-3 | 0.02 | NE | NE | 0.00443 U | 0.00434 U | 0.00464 U | **0.00207 J** | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Methoxychlor | 72-43-5 | 900 | NE | NE | 0.00443 U | 0.00434 U | 0.00464 U | 0.0039 U | 0.00396 U | 0.042 U | 0.043 U | 0.048 U | 0.041 U |
| Toxaphene | 8001-35-2 | NE | NE | NE | 0.055 U | 0.054 U | 0.058 U | 0.049 U | 0.05 U | 0.53 U | 0.542 U | 0.6 U | 0.513 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 0.5 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.02 U | 0.017 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | 1.9 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.02 U | 0.017 U |
| 2,4,5-TP (Silvex) | 93-72-1 | 3.8 | 100 | 1000 | 0.019 U | 0.019 U | 0.019 U | 0.017 U | 0.017 U | 0.018 U | 0.018 U | 0.02 U | 0.017 U |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | NE | **7100** | **6690** | **3390** | **8400** | **7840** | **8190** | **8110** | **11700** | **7500** |
| Antimony | 7440-36-0 | NE | NE | NE | **1.07** | **1.76** | 0.639 U | 0.537 U | 0.56 U | 0.55 U | 0.587 U | 0.665 U | 0.587 U |
| Arsenic | 7440-38-2 | 16 | 16 | 16 | **4.33** | **9.82** | **3.58** | **15.2** | **16.3** | **5.9** | **6.58** | **6.34** | **15.1** |
| Barium | 7440-39-3 | 820 | 400 | 10000 | **73.2** | **161** | **23.8** | **159** | **149** | **229** | **227** | **271** | **439** |
| Beryllium | 7440-41-7 | 47 | 72 | 2700 | **0.617** | **0.303 J** | 0.639 U | **0.52 J** | **0.473 J** | **3.57** | **2.9** | **27.5** | **7.11** |
| Cadmium | 7440-43-9 | 7.5 | 4.3 | 60 | **0.495 J** | 0.602 U | 0.639 U | **1.19** | **1.03** | **1.03** | **1.14** | **1.09** | **0.736** |
| Calcium | 7440-70-2 | NE | NE | NE | **15400** | **1990** | **4090** | **15900** | **6700** | **10300** | **11600** | **32300** | **10600** |
| Chromium | 7440-47-3 | NE | NE | NE | **23.8** | **29** | **8.89** | **40.1** | **36.8** | **72.5** | **64.1** | **257** | **89.4** |
| Hexavalent Chromuim (Cr VI) | 18540-29-9 | 19 | 110 | 800 | 1.17 U | 1.17 U | 1.18 U | 1.04 U | 1.04 U | 1.1 UJ | 1.09 UJ | 1.24 UJ | 1.08 UJ |
| Cobalt | 7440-48-4 | NE | NE | NE | **6.67** | **5.04** | **1.37** | **6.13** | **6.44** | **25.8** | **26.5** | **51** | **21.5** |
| Copper | 7440-50-8 | 1720 | 270 | 10000 | **123** | **98.9** | **14.7** | **193** | **237** | **398** | **369** | **986** | **496** |
| Iron | 7439-89-6 | NE | NE | NE | **15600** | **20600** | **6310** | **21300** | **19900** | **28000** | **28900** | **55800** | **30200** |
| Lead | 7439-92-1 | 450 | 400 | 3900 | **87.7** | **169** | **17.4** | **256** | **268** | **1080** | **1070** | **2030** | **868** |
| Magnesium | 7439-95-4 | NE | NE | NE | **5070** | **2240** | **831** | **8440** | **3100** | **5080** | **5280** | **12400** | **6240** |
| Manganese | 7439-96-5 | 2000 | 2000 | 10000 | **286** | **112** | **95.5** | **374** | **404** | **362** | **351** | **687** | **352** |
| Mercury | 7439-97-6 | 0.73 | 0.81 | 5.7 | **0.171** | **0.354** | **0.067** | **1.46** | **4.47** | **1.02** | **0.945** | **0.627** | **0.798** |
| Nickel | 7440-02-0 | 130 | 310 | 10000 | **20.1** | **20** | **3.98** | **42.3** | **40.8** | **203** | **176** | **453** | **195** |
| Potassium | 7440-09-7 | NE | NE | NE | **1160** | **1480** | **307** | **685** | **679** | **960** | **1000** | **1210** | **825** |
| Selenium | 7782-49-2 | 4 | 180 | 6800 | **1.47** | **1.86** | **0.587 J** | **1.36** | **1.35** | **1.9** | **2.39** | **3.8** | **1.66** |
| Silver | 7440-22-4 | 8.3 | 180 | 6800 | **0.282 J** | **0.387 J** | 0.639 U | **0.829** | **0.858** | **0.551** | **0.537 J** | **1.46** | **0.949** |
| Sodium | 7440-23-5 | NE | NE | NE | **218** | **443** | **37.4 J** | **150** | **139** | **311** | **346** | **922** | **353** |
| Thallium | 7440-28-0 | NE | NE | NE | 0.609 U | 0.602 U | 0.639 U | 0.537 U | **0.142 J** | **0.147 J** | 0.587 U | 0.665 U | 0.587 U |
| Vanadium | 7440-62-2 | NE | NE | NE | **28.1** | **33.8** | **11.5** | **36.1** | **30.4** | **25.5** | **28** | **36.1** | **41.2** |
| Zinc | 7440-66-6 | 2480 | 10000 | 10000 | **539** | **1320** | **88.5** | **332** | **341** | **1350** | **1240** | **4140** | **1330** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NE | 2.92 U | 2.92 U | 2.94 U | 2.6 U | 2.6 U | 2.7 U | 2.7 U | 3.1 U | 2.7 U |
| **Other (mg/kg)** | | | | | | | | | | | | | |
| Total Organic Carbon | TOC | NE | NE | NE | **22000** | **40000** | **35000** | **53100** | **37000** | **39400** | **34700** | **54500** | **22000** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SS315 |
| | | | | Sample Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SSXX-030618 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/14/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 |
| | | | | Parent Sample | | | | | | | | | | GPEC-SS315 |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 0.05 | 4.8 | 89 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 108-88-3 | 0.7 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 100-41-4 | 1 | 41 | 780 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| m,p-Xylene | 108383/106423 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1.6 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total BTEX | TBTEX | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrolein (propenal) | 107-02-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromoform | 75-25-2 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromomethane | 74-83-9 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 0.3 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | 2.7 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon tetrachloride | 56-23-5 | 0.76 | 2.4 | 44 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlorobenzene | 108-90-7 | 1.1 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroethane | 75-00-3 | 1.9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 0.37 | 49 | 700 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloromethane | 74-87-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | 124-48-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 0.27 | 26 | 480 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloroethane | 107-06-2 | 0.02 | 3.1 | 60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,2-Dichloroethene | 156-59-2 | 0.25 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,2-Dichloroethene | 156-60-5 | 0.19 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SS315 |
| | | | | Sample Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SSXX-030618 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/14/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 |
| | | | | Parent Sample | | | | | | | | | | GPEC-SS315 |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.33 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloropropane | 78-87-5 | 0.33 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether | 108-20-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 1634-04-4 | 0.93 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | 1 | 1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | 75-09-2 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 100-42-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tetrachloroethene | 127-18-4 | 1.3 | 19 | 300 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | 6 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 0.68 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichloroethene | 79-01-6 | 0.47 | 21 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | 0.34 | 80 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 0.02 | 0.9 | 27 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total VOCs | TVOC | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PAHs (mg/kg)** | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 98 | 100 | 1000 | **0.04** | 0.038 U | 0.036 U | **0.073** | 0.388 U | **0.585 D** | **0.117** | **0.068** | 0.037 U | 0.038 U |
| Acenaphthylene | 208-96-8 | 107 | 100 | 1000 | **0.084** | **0.097** | **0.22** | **0.379** | **1.14** | **2.9 D** | **0.29** | **1.49** | **0.284** | **0.29** |
| Anthracene | 120-12-7 | 1000 | 100 | 1000 | **0.11** | **0.086** | **0.148** | **0.371** | **0.685** | **2.7 D** | **0.479** | **0.755** | **0.218** | **0.196** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 100 | 1000 | **0.235** | **0.352** | **0.754** | **0.392** | **1.35** | **5.86 D** | **0.659** | **1.92** | **0.736** | **0.584** |
| Fluoranthene | 206-44-0 | 1000 | 100 | 1000 | **0.88** | **0.61** | **1.25** | **2.65** | **1.55** | **13.7 D** | **3.35** | **2.87** | **0.834** | **0.732** |
| Fluorene | 86-73-7 | 386 | 100 | 1000 | **0.037 J** | 0.038 U | **0.053** | **0.11** | 0.388 U | **1.21 D** | **0.137** | **0.263** | **0.07** | **0.036 J** |
| 2-Methylnaphthalene | 91-57-6 | 36.4 | NE | NE | 0.039 U | 0.038 U | **0.063** | **0.058** | 0.388 U | **0.715 D** | **0.047** | **0.197** | **0.046** | **0.036 J** |
| Naphthalene | 91-20-3 | 12 | 100 | 1000 | 0.039 U | **0.043** | **0.097** | **0.121** | 0.388 U | **0.941 D** | **0.083** | **0.194** | 0.037 U | **0.063** |
| Phenanthrene | 85-01-8 | 1000 | 100 | 1000 | **0.4** | **0.26** | **0.456** | **1.16** | **0.81** | **8.95 D** | **1.81** | **1.72** | **0.401** | **0.276** |
| Pyrene | 129-00-0 | 1000 | 100 | 1000 | **0.739** | **0.637** | **1.43** | **1.83** | **2.02** | **16 D** | **3.43** | **4.77** | **1.17** | **0.898** |
| Benz[a]anthracene | 56-55-3 | 1 | 1 | 11 | **0.497** | **0.374** | **0.862** | **1.07** | **1.31** | **9.45 D** | **1.75** | **3.02** | **0.601** | **0.502** |
| Benzo[a]pyrene | 50-32-8 | 22 | 1 | 1.1 | **0.499** | **0.427** | **0.992** | **1.07** | **1.17** | **9.72 D** | **1.51** | **3.44** | **0.657** | **0.592** |
| Benzo[b]fluoranthene | 205-99-2 | 1.7 | 1 | 11 | **0.479** | **0.383** | **0.835** | **0.944** | **1.08** | **7.73 D** | **1.55** | **2.53** | **0.61** | **0.536** |
| Benzo[k]fluoranthene | 207-08-9 | 1.7 | 3.9 | 110 | **0.498** | **0.335** | **0.754** | **1.1** | **1.12** | **6.11 D** | **1.44** | **2.25** | **0.558** | **0.502** |
| Chrysene | 218-01-9 | 1 | 3.9 | 110 | **0.544** | **0.442** | **1.01** | **1.17** | **1.64** | **10 D** | **1.96** | **4.02** | **0.786** | **0.66** |
| Dibenz[a,h]anthracene | 53-70-3 | 1000 | 0.33 | 1.1 | **0.086** | **0.104** | **0.231** | **0.175** | 0.388 U | **1.82 D** | **0.265** | **0.898** | **0.18** | **0.186** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 8.2 | 0.5 | 11 | **0.235** | **0.286** | **0.615** | **0.371** | **0.77** | **4.77 D** | **0.538** | **1.55** | **0.409** | **0.357** |
| Total PAHs | TPAH | NE | NE | NE | **5.363** | **4.436** | **9.77** | **13.044** | **14.645** | **103.161** | **19.415** | **31.955** | **7.56** | **6.446** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SS315 |
| | | | | Sample Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SSXX-030618 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/14/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 |
| | | | | Parent Sample | | | | | | | | | | GPEC-SS315 |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | | |
| Aniline | 62-53-3 | 0.33 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Benzidine | 92-87-5 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| Benzoic acid | 65-85-0 | 2.7 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 435 | NE | NE | **0.587** | **0.07** | **0.15** | **0.342 J** | 0.388 UJ | 0.205 U | **0.18** | **0.182** | **0.272 J** | **0.255** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | 122 | NE | NE | **0.138** | 0.038 U | **0.044** | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | **0.043** | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | NE | **0.049** | 0.038 U | **0.036 J** | **0.077** | 0.388 U | **0.272 D** | **0.112** | **0.04** | 0.037 U | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | 0.22 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 6.2 | 59 | 1000 | 0.039 U | 0.038 U | 0.036 U | **0.041** | 0.388 U | **0.248 D** | **0.058** | 0.035 U | 0.037 U | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1.1 | 100 | 1000 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 2.4 | 49 | 560 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 1.8 | 13 | 250 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | 0.4 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | 7.7 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | 27 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | 8.1 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | **0.035 J** | **0.034 J** | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | 0.2 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 R | 0.388 R | 0.205 U | 0.041 U | 0.035 U | 0.037 R | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | 0.17 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | 120 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 1.4 | 1.2 | 12 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorobutadiene (C-46) | 87-68-3 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 R | 0.388 R | 0.205 U | 0.041 U | 0.035 U | 0.037 R | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Isophorone | 78-59-1 | 4.4 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | **0.499 D** | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 0.33 | 100 | 1000 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 0.33 | 100 | 1000 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SS315 |
| | | | | Sample Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SSXX-030618 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/14/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 |
| | | | | Parent Sample | | | | | | | | | | GPEC-SS315 |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 0.4 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| 3-Nitroaniline | 99-09-2 | 0.5 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| Nitrobenzene | 98-95-3 | 0.17 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | 0.3 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| 4-Nitrophenol | 100-02-7 | 0.1 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodimethylamine (NDMA) | 62-75-9 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodi-n-propylamine (NDPA) | 621-64-7 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodiphenylamine (NDFA) | 86-30-6 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 0.8 | 6.7 | 55 | 0.039 U | 0.038 U | 0.036 U | 0.037 UJ | 0.388 UJ | 0.205 U | 0.041 U | 0.035 U | 0.037 UJ | 0.038 U |
| Phenol | 108-95-2 | 0.33 | 100 | 1000 | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.1 | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | NE | 0.039 U | 0.038 U | 0.036 U | 0.037 U | 0.388 U | 0.205 U | 0.041 U | 0.035 U | 0.037 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | NE | **6.137** | **4.506** | **10** | **13.504** | **14.645** | **104.18** | **19.765** | **32.212** | **7.909** | **6.701** |
| **PCB Aroclors (mg/kg)** | | NE | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | NE | 0.02 U | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | NE | **0.033 D** | 0.068 U | 0.066 U | 0.065 U | 0.071 U | 0.074 U | 0.072 U | 0.063 U | 0.065 U | 0.021 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 3.2 | 1 | 25 | **0.033** | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.19 | 0.097 | 1.4 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| alpha-BHC (Hexachlorocyclohexane) | 319-84-6 | 0.02 | 0.48 | 6.8 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| beta-BHC (beta-Hexachlorocyclohexane) | 319-85-7 | 0.09 | 0.36 | 14 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane) | 58-89-9 | 0.1 | 1.3 | 23 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| delta-BHC (delta-Hexachlorocyclohexane) | 319-86-8 | 0.25 | 100 | 1000 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NE | **0.32 D** | 0.057 U | 0.055 U | 0.055 U | 0.059 U | 0.062 U | 0.06 U | 0.052 U | 0.054 U | 0.053 U |
| alpha-Chlordane | 5103-71-9 | 2.9 | 4.2 | 47 | **0.059 D** | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| gamma-Chlordane | 5103-74-2 | 14 | NE | NE | **0.035 D** | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| 4,4-DDD (p,p-DDD) | 72-54-8 | 14 | 13 | 180 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| 4,4'-DDE (p,p'-DDE) | 72-55-9 | 17 | 8.9 | 120 | **0.017 D** | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| 4,4'-DDT (p,p'-DDT) | 50-29-3 | 136 | 7.9 | 94 | **0.024 D** | **0.00434 J** | **0.016** | **0.00722** | **0.00567** | 0.00495 U | **0.011** | **0.021** | **0.00836** | **0.00318 J** |
| Dieldrin | 60-57-1 | 0.1 | 0.2 | 2.8 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| alpha-Endosulfan (I) | 959-98-8 | 102 | 24 | 920 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SS315 |
| | | | | Sample Name | GPEC-SS307 | GPEC-SS308 | GPEC-SS309 | GPEC-SS310 | GPEC-SS311 | GPEC-SS312 | GPEC-SS313 | GPEC-SS314 | GPEC-SS315 | GPEC-SSXX-030618 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/14/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 | 3/6/2018 |
| | | | | Parent Sample | | | | | | | | | | GPEC-SS315 |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| beta-Endosulfan (II) | 33213-65-9 | 102 | 24 | 920 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Endosulfan sulfate | 1031-07-8 | 1000 | 24 | 920 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Endrin | 72-20-8 | 0.06 | 11 | 410 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NE | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Endrin ketone | 53494-70-5 | NE | NE | NE | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Heptachlor | 76-44-8 | 0.38 | 2.1 | 29 | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Heptachlor epoxide | 1024-57-3 | 0.02 | NE | NE | **0.00809 D** | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Methoxychlor | 72-43-5 | 900 | NE | NE | 0.00163 U | 0.00453 U | 0.00442 U | 0.00436 U | 0.00471 U | 0.00495 U | 0.00481 U | 0.00418 U | 0.00432 U | 0.00424 U |
| Toxaphene | 8001-35-2 | NE | NE | NE | 0.02 U | 0.057 U | 0.055 U | 0.055 U | 0.059 U | 0.062 U | 0.06 U | 0.052 U | 0.054 U | 0.053 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 0.5 | NE | NE | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | **0.013 J** | 0.02 U | **0.011 J** | **0.011 J** | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | 1.9 | NE | NE | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.021 U | 0.02 U | 0.018 U | 0.019 U | 0.019 U |
| 2,4,5-TP (Silvex) | 93-72-1 | 3.8 | 100 | 1000 | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.021 U | 0.02 U | 0.018 U | 0.019 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | NE | **7060** | **7780** | **6200** | **5470** | **5730** | **5910** | **9400** | **6880** | **5260** | **5430** |
| Antimony | 7440-36-0 | NE | NE | NE | **3.54** | **0.708** | **1.48** | **4.14** | **3.39** | **2.11** | **8.17** | **1.71** | **2.06** | **2.41** |
| Arsenic | 7440-38-2 | 16 | 16 | 16 | **6.31** | **4.39** | **5.44** | **9.82** | **5.32** | **7.82** | **17.8** | **3.63** | **4.65** | **3.95** |
| Barium | 7440-39-3 | 820 | 400 | 10000 | **88.2** | **56.2** | **95.5** | **160** | **227** | **91.6** | **605** | **73.1** | **55.7** | **72.9** |
| Beryllium | 7440-41-7 | 47 | 72 | 2700 | **0.486 J** | **0.367 J** | **0.352 J** | **0.399 J** | **0.387 J** | **0.39 J** | **0.618 J** | **0.364 J** | **0.322 J** | **0.346 J** |
| Cadmium | 7440-43-9 | 7.5 | 4.3 | 60 | **1.29** | **0.543 J** | **0.923** | **1.25** | **0.836** | **0.557 J** | **2.45** | **1.02** | **0.531 J** | **0.55 J** |
| Calcium | 7440-70-2 | NE | NE | NE | **12700** | **5810** | **2720** | **6900** | **12000** | **5780** | **7660** | **3230** | **7980** | **5780** |
| Chromium | 7440-47-3 | NE | NE | NE | **38.2** | **23.2** | **31.6** | **24.5** | **22.9** | **21.3** | **44.5** | **25.1** | **19.5** | **20.4** |
| Hexavalent Chromuim (Cr VI) | 18540-29-9 | 19 | 110 | 800 | 1.23 U | 1.19 U | 1.14 U | 1.13 U | 1.19 U | 1.3 U | 1.26 U | 1.09 U | 1.13 U | 1.14 U |
| Cobalt | 7440-48-4 | NE | NE | NE | **6.1** | **6.25** | **6** | **5.79** | **4.63** | **5.2** | **12.4** | **5.24** | **4.65** | **5.43** |
| Copper | 7440-50-8 | 1720 | 270 | 10000 | **122** | **76.8** | **231** | **188** | **119** | **132** | **354** | **168** | **116** | **121** |
| Iron | 7439-89-6 | NE | NE | NE | **17300** | **20000** | **15800** | **17600** | **19400** | **14300** | **62600** | **14100** | **12700** | **14200** |
| Lead | 7439-92-1 | 450 | 400 | 3900 | **185** | **84.1** | **468** | **305** | **252** | **186** | **1650** | **91.2** | **83.5** | **107** |
| Magnesium | 7439-95-4 | NE | NE | NE | **4380** | **4110** | **2740** | **3780** | **3160** | **3310** | **3010** | **2610** | **3100** | **3160** |
| Manganese | 7439-96-5 | 2000 | 2000 | 10000 | **252** | **332** | **219** | **309** | **270** | **246** | **515** | **246** | **253** | **407** |
| Mercury | 7439-97-6 | 0.73 | 0.81 | 5.7 | **0.34** | **0.145** | **0.092** | **0.472** | **0.749** | 0.028 U | **0.522** | **0.075** | **0.148** | **0.132** |
| Nickel | 7440-02-0 | 130 | 310 | 10000 | **35.7** | **23** | **31.5** | **24.5** | **17.2** | **25** | **69.7** | **31.4** | **26.6** | **28.4** |
| Potassium | 7440-09-7 | NE | NE | NE | **784** | **934** | **1010** | **868** | **938** | **868** | **1160** | **938** | **998** | **1150** |
| Selenium | 7782-49-2 | 4 | 180 | 6800 | **1.81** | **1.58** | **1.64** | **1.7** | **1** | **1.6** | **1.84** | **1.9** | **1.57** | **1.33** |
| Silver | 7440-22-4 | 8.3 | 180 | 6800 | **0.38 J** | 0.644 U | **0.606 J** | **0.61** | 0.625 U | **0.303 J** | **1.01** | **0.379 J** | **0.283 J** | **0.276 J** |
| Sodium | 7440-23-5 | NE | NE | NE | **284** | **532** | **319** | **207** | **349** | **414** | **272** | **162** | **221** | **270** |
| Thallium | 7440-28-0 | NE | NE | NE | 0.654 U | 0.644 U | 0.606 U | 0.599 U | 0.625 U | 0.694 U | 0.648 U | 0.568 U | **0.314 J** | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | NE | **30.6** | **34** | **31.3** | **26.2** | **26.8** | **38.9** | **37.5** | **27** | **25** | **24.8** |
| Zinc | 7440-66-6 | 2480 | 10000 | 10000 | **273** | **132** | **385** | **319** | **319** | **211** | **646** | **331** | **229** | **247** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NE | 3.07 U | 2.99 U | 2.85 U | 2.83 U | 2.97 U | 3.26 U | 3.16 U | 2.74 U | 2.82 U | 2.84 U |
| **Other (mg/kg)** | | | | | | | | | | | | | | |
| Total Organic Carbon | TOC | NE | NE | NE | **40000** | **21000** | **35000** | **34000 J** | **39000 J** | **95000** | **44000** | **14000** | **14000 J** | **14000** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Sample Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/6/2018 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 |
| | | | | Parent Sample | | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 0.05 | 4.8 | 89 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 108-88-3 | 0.7 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 100-41-4 | 1 | 41 | 780 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| m,p-Xylene | 108383/106423 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1.6 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total BTEX | TBTEX | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrolein (propenal) | 107-02-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromoform | 75-25-2 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromomethane | 74-83-9 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 0.3 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | 2.7 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon tetrachloride | 56-23-5 | 0.76 | 2.4 | 44 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlorobenzene | 108-90-7 | 1.1 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroethane | 75-00-3 | 1.9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 0.37 | 49 | 700 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloromethane | 74-87-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | 124-48-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 0.27 | 26 | 480 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloroethane | 107-06-2 | 0.02 | 3.1 | 60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,2-Dichloroethene | 156-59-2 | 0.25 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,2-Dichloroethene | 156-60-5 | 0.19 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Sample Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/6/2018 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 |
| | | | | Parent Sample | | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.33 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloropropane | 78-87-5 | 0.33 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether | 108-20-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 1634-04-4 | 0.93 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | 1 | 1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | 75-09-2 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 100-42-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tetrachloroethene | 127-18-4 | 1.3 | 19 | 300 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | 6 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 0.68 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichloroethene | 79-01-6 | 0.47 | 21 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | 0.34 | 80 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 0.02 | 0.9 | 27 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total VOCs | TVOC | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 98 | 100 | 1000 | **0.088** | 0.035 U | **0.036 J** | **0.049** | **0.07** | **0.06** | **0.563 D** | **0.055** | **0.054** |
| Acenaphthylene | 208-96-8 | 107 | 100 | 1000 | **1.09 J** | **0.079** | **0.252** | **0.118** | **0.147** | **0.136** | **0.283 D** | **0.035 J** | **0.088** |
| Anthracene | 120-12-7 | 1000 | 100 | 1000 | **0.882 J** | **0.068** | **0.181** | **0.203** | **0.242** | **0.223** | **2.08 D** | **0.155** | **0.202** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 100 | 1000 | **1.35 J** | **0.424** | **0.738** | **0.363** | **0.411** | **0.298** | **2.44 D** | **0.174** | **0.237** |
| Fluoranthene | 206-44-0 | 1000 | 100 | 1000 | **3.77 J** | **0.524** | **1.17** | **1.27** | **1.49** | **1.24** | **13.3 D** | **1.02** | **1.62** |
| Fluorene | 86-73-7 | 386 | 100 | 1000 | **0.358** | 0.035 U | **0.103** | **0.051** | **0.07** | **0.06** | **0.573 D** | **0.045** | **0.051** |
| 2-Methylnaphthalene | 91-57-6 | 36.4 | NE | NE | **0.24 J** | 0.035 U | **0.079** | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Naphthalene | 91-20-3 | 12 | 100 | 1000 | **0.367 J** | 0.035 U | **0.109** | **0.031 J** | **0.04** | 0.036 U | 0.197 U | 0.037 U | **0.038** |
| Phenanthrene | 85-01-8 | 1000 | 100 | 1000 | **2.18 J** | **0.242** | **0.811** | **0.575** | **0.669** | **0.621** | **9.24 D** | **0.54** | **0.674** |
| Pyrene | 129-00-0 | 1000 | 100 | 1000 | **4.8 J** | **0.638** | **1.36** | **1.3** | **1.64** | **1.3** | **11.5 D** | **0.958** | **1.57** |
| Benz[a]anthracene | 56-55-3 | 1 | 1 | 11 | **3.23 J** | **0.355** | **0.774** | **0.812** | **0.98** | **0.81** | **5.61 D** | **0.635** | **0.985** |
| Benzo[a]pyrene | 50-32-8 | 22 | 1 | 1.1 | **2.68 J** | **0.419** | **0.823** | **0.545** | **0.694** | **0.47** | **2.72 D** | **0.357** | **0.646** |
| Benzo[b]fluoranthene | 205-99-2 | 1.7 | 1 | 11 | **2.72 J** | **0.465** | **0.753** | **0.468** | **0.609** | **0.417** | **2.42 D** | **0.319** | **0.636** |
| Benzo[k]fluoranthene | 207-08-9 | 1.7 | 3.9 | 110 | **1.91** | **0.3** | **0.572** | **0.511** | **0.561** | **0.513** | **2.76 D** | **0.337** | **0.576** |
| Chrysene | 218-01-9 | 1 | 3.9 | 110 | **3.17 J** | **0.44** | **0.897** | **0.844** | **1.03** | **0.874** | **5.3 D** | **0.61** | **1.01** |
| Dibenz[a,h]anthracene | 53-70-3 | 1000 | 0.33 | 1.1 | **0.518** | **0.126** | **0.221** | **0.099** | **0.11** | **0.072** | **0.669 D** | **0.061** | **0.085** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 8.2 | 0.5 | 11 | **1.02** | **0.326** | **0.554** | **0.309** | **0.358** | **0.252** | **1.7 D** | **0.17** | **0.276** |
| Total PAHs | TPAH | NE | NE | NE | **30.373** | **4.406** | **9.433** | **7.548** | **9.121** | **7.346** | **61.158** | **5.471** | **8.748** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Sample Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/6/2018 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 |
| | | | | Parent Sample | | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | |
| Aniline | 62-53-3 | 0.33 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Benzidine | 92-87-5 | NE | NE | NE | 0.036 R | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Benzoic acid | 65-85-0 | 2.7 | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 435 | NE | NE | **0.113 J** | **0.124** | **0.09** | **0.135** | **0.087** | **0.222** | **2.71 D** | **0.108** | **0.078** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | 122 | NE | NE | 0.036 U | **0.048** | 0.037 U | 0.035 U | 0.036 U | **0.042** | 0.197 U | 0.037 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | NE | **0.091** | 0.035 U | **0.04** | **0.058** | **0.06** | **0.076** | **1.08 D** | **0.036 J** | **0.051** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | 0.22 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 6.2 | 59 | 1000 | **0.062** | 0.035 U | 0.037 U | 0.035 U | **0.031 J** | 0.036 U | **0.238 D** | 0.037 U | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1.1 | 100 | 1000 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 2.4 | 49 | 560 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 1.8 | 13 | 250 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | 0.4 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | 7.7 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | 27 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | 8.1 | NE | NE | 0.036 U | **0.034 J** | 0.037 U | **0.027 J** | 0.036 U | **0.053** | 0.197 U | 0.037 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | NE | 0.036 R | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | 0.2 | NE | NE | 0.036 R | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | 0.17 | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | 120 | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 1.4 | 1.2 | 12 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Hexachlorobutadiene (C-46) | 87-68-3 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | NE | 0.036 R | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Isophorone | 78-59-1 | 4.4 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 0.33 | 100 | 1000 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 0.33 | 100 | 1000 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Sample Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/6/2018 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 |
| | | | | Parent Sample | | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 0.4 | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | 0.5 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Nitrobenzene | 98-95-3 | 0.17 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | 0.3 | NE | NE | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | 0.1 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| N-Nitrosodimethylamine (NDMA) | 62-75-9 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| N-Nitrosodi-n-propylamine (NDPA) | 621-64-7 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| N-Nitrosodiphenylamine (NDFA) | 86-30-6 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 0.8 | 6.7 | 55 | 0.036 UJ | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Phenol | 108-95-2 | 0.33 | 100 | 1000 | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.1 | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | NE | 0.036 U | 0.035 U | 0.037 U | 0.035 U | 0.036 U | 0.036 U | 0.197 U | 0.037 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | NE | **30.639** | **4.612** | **9.563** | **7.768** | **9.299** | **7.739** | **65.186** | **5.615** | **8.877** |
| **PCB Aroclors (mg/kg)** | | NE | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | 0.108 U | **7.02 D** | 0.218 U | 0.225 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | NE | 0.065 U | 0.02 U | 0.068 U | 0.103 U | 0.109 U | **1.3 D** | 0.121 U | 0.218 U | 0.225 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 3.2 | 1 | 25 | ND | ND | ND | ND | ND | **1.3** | **7.02** | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.19 | 0.097 | 1.4 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| alpha-BHC (Hexachlorocyclohexane) | 319-84-6 | 0.02 | 0.48 | 6.8 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| beta-BHC (beta-Hexachlorocyclohexane) | 319-85-7 | 0.09 | 0.36 | 14 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane) | 58-89-9 | 0.1 | 1.3 | 23 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| delta-BHC (delta-Hexachlorocyclohexane) | 319-86-8 | 0.25 | 100 | 1000 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NE | 0.054 U | 0.051 U | 0.056 U | 0.051 U | 0.055 U | 0.054 U | 0.061 U | 0.273 U | 0.282 U |
| alpha-Chlordane | 5103-71-9 | 2.9 | 4.2 | 47 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| gamma-Chlordane | 5103-74-2 | 14 | NE | NE | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| 4,4-DDD (p,p-DDD) | 72-54-8 | 14 | 13 | 180 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| 4,4'-DDE (p,p'-DDE) | 72-55-9 | 17 | 8.9 | 120 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| 4,4'-DDT (p,p'-DDT) | 50-29-3 | 136 | 7.9 | 94 | **0.014** | **0.0039 J** | **0.00727** | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Dieldrin | 60-57-1 | 0.1 | 0.2 | 2.8 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| alpha-Endosulfan (I) | 959-98-8 | 102 | 24 | 920 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | Area | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Sample Name | GPEC-SS316 | GPEC-SS317 | GPEC-SS318 | GPEC-SS319 | GPEC-SS320 | GPEC-SS321 | GPEC-SS322 | GPEC-SS323 | GPEC-SS324 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/6/2018 | 3/6/2018 | 3/6/2018 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 |
| | | | | Parent Sample | | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | |
| beta-Endosulfan (II) | 33213-65-9 | 102 | 24 | 920 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Endosulfan sulfate | 1031-07-8 | 1000 | 24 | 920 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Endrin | 72-20-8 | 0.06 | 11 | 410 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NE | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Endrin ketone | 53494-70-5 | NE | NE | NE | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Heptachlor | 76-44-8 | 0.38 | 2.1 | 29 | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Heptachlor epoxide | 1024-57-3 | 0.02 | NE | NE | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Methoxychlor | 72-43-5 | 900 | NE | NE | 0.00435 U | 0.00405 U | 0.0045 U | 0.00411 U | 0.00437 U | 0.00432 U | 0.00484 U | 0.022 U | 0.023 U |
| Toxaphene | 8001-35-2 | NE | NE | NE | 0.054 U | 0.051 U | 0.056 U | 0.051 U | 0.055 U | 0.054 U | 0.061 U | 0.273 U | 0.282 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 0.5 | NE | NE | 0.018 U | 0.018 U | 0.019 U | 0.018 U | 0.018 U | **0.016 J** | **0.024** | 0.019 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | 1.9 | NE | NE | 0.018 U | 0.018 U | 0.019 U | 0.018 U | 0.018 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U |
| 2,4,5-TP (Silvex) | 93-72-1 | 3.8 | 100 | 1000 | 0.018 U | 0.018 U | 0.019 U | 0.018 U | 0.018 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | NE | **4610** | **5900** | **4600** | **6520** | **8960** | **10300** | **5640** | **5560** | **9410** |
| Antimony | 7440-36-0 | NE | NE | NE | **12.1** | **1.86** | **1.41** | **24.9** | **3.55** | **5.8** | **71** | **0.516 J** | **0.71** |
| Arsenic | 7440-38-2 | 16 | 16 | 16 | **7.45** | **4.31** | **5.41** | **4.61** | **13.6** | **5.63** | **13.9** | **2.57** | **4.34** |
| Barium | 7440-39-3 | 820 | 400 | 10000 | **187** | **56.7** | **76.6** | **200** | **136** | **284** | **513** | **60.4** | **77.3** |
| Beryllium | 7440-41-7 | 47 | 72 | 2700 | 0.565 U | **0.383 J** | **0.331 J** | **1.78** | **3.65** | **21** | **1.4** | 0.598 U | **0.534 J** |
| Cadmium | 7440-43-9 | 7.5 | 4.3 | 60 | **0.706** | **0.875** | **0.896** | **0.805** | **0.573 J** | **1.27** | **2.35** | 0.598 U | 0.599 U |
| Calcium | 7440-70-2 | NE | NE | NE | **3640** | **3500** | **4180** | **6320** | **5600** | **66200** | **14500** | **13900** | **13700** |
| Chromium | 7440-47-3 | NE | NE | NE | **22.3** | **24.2** | **21.3** | **51.8** | **46.2** | **284** | **46.8** | **17.2** | **24** |
| Hexavalent Chromuim (Cr VI) | 18540-29-9 | 19 | 110 | 800 | 1.13 U | 1.07 U | 1.13 U | 1.07 U | 1.11 U | 1.13 U | 1.22 U | 1.11 U | 1.16 U |
| Cobalt | 7440-48-4 | NE | NE | NE | **4.54** | **6.66** | **4.31** | **13.6** | **21.1** | **50.1** | **10.6** | **4.95** | **7.04** |
| Copper | 7440-50-8 | 1720 | 270 | 10000 | **172** | **163** | **220** | **280** | **419** | **949** | **314** | **79.9** | **38.4** |
| Iron | 7439-89-6 | NE | NE | NE | **18700** | **16300** | **12600** | **21900** | **28700** | **49800** | **48300** | **14700** | **19200** |
| Lead | 7439-92-1 | 450 | 400 | 3900 | **205** | **116** | **152** | **760** | **449** | **2160** | **836** | **53.7** | **120** |
| Magnesium | 7439-95-4 | NE | NE | NE | **2170** | **3350** | **2750** | **3470** | **3730** | **38800** | **4220** | **4980** | **5270** |
| Manganese | 7439-96-5 | 2000 | 2000 | 10000 | **238** | **242** | **179** | **182** | **264** | **524** | **533** | **229** | **310** |
| Mercury | 7439-97-6 | 0.73 | 0.81 | 5.7 | **0.438** | **0.111** | **0.172** | **1.01** | **0.539** | **0.443** | **1.67** | **0.169** | **0.144** |
| Nickel | 7440-02-0 | 130 | 310 | 10000 | **29.5** | **33.3** | **18.1** | **105** | **198** | **437** | **73.2** | **15.3** | **24** |
| Potassium | 7440-09-7 | NE | NE | NE | **681** | **1010** | **688** | **842** | **1140** | **1090** | **912** | **914** | **1360** |
| Selenium | 7782-49-2 | 4 | 180 | 6800 | **1.26** | **1.39** | **1.32** | **0.655** | **2.53** | **4.02** | **1.68** | **1.16** | **1.3** |
| Silver | 7440-22-4 | 8.3 | 180 | 6800 | 0.565 U | **0.24 J** | **0.385 J** | **0.459 J** | **0.643** | **1.61** | **0.633 J** | 0.598 U | 0.599 U |
| Sodium | 7440-23-5 | NE | NE | NE | **135** | **188** | **192** | **346** | **185** | **1020** | **164** | **204** | **1110** |
| Thallium | 7440-28-0 | NE | NE | NE | 0.565 U | 0.567 U | 0.606 U | 0.574 U | 0.583 U | 0.611 U | 0.652 U | 0.598 U | 0.599 U |
| Vanadium | 7440-62-2 | NE | NE | NE | **23.1** | **30.5** | **22.3** | **29.2** | **29.5** | **29.1** | **29.1** | **24.8** | **31.3** |
| Zinc | 7440-66-6 | 2480 | 10000 | 10000 | **246** | **387** | **188** | **852** | **747** | **3750** | **731** | **74.6** | **105** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NE | 2.83 U | 2.67 U | 2.82 U | 2.7 U | 2.8 U | 2.8 U | 3 U | 2.8 U | 2.9 U |
| **Other (mg/kg)** | | | | | | | | | | | | | |
| Total Organic Carbon | TOC | NE | NE | NE | **28000 J** | **13000** | **27000** | **18000** | **35000** | **70500** | **66600** | **28700** | **24200** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | | Location Name | GPEC-SS325 | GPEC-SS325 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | | Sample Name | GPEC-SS325 | GPEC-SS-XX-10112017 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | | Sample Date | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 3/14/2018 | 3/14/2018 | 10/11/2017 | 3/14/2018 | 3/14/2018 |
| | | | | | Parent Sample | | GPEC-SS325 | | | | | | | | |
| **Analyte** | **CAS No.** | **RESTRICTED USE PoGW** | **Restricted Residential SCO[1]** | **Industrial SCO** | | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 0.05 | 4.8 | 89 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toluene | 108-88-3 | 0.7 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Ethylbenzene | 100-41-4 | 1 | 41 | 780 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| m,p-Xylene | 108383/106423 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1.6 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total BTEX | TBTEX | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrolein (propenal) | 107-02-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromoform | 75-25-2 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromomethane | 74-83-9 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 0.3 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | 2.7 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon tetrachloride | 56-23-5 | 0.76 | 2.4 | 44 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlorobenzene | 108-90-7 | 1.1 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroethane | 75-00-3 | 1.9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 0.37 | 49 | 700 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloromethane | 74-87-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | 124-48-1 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 0.27 | 26 | 480 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloroethane | 107-06-2 | 0.02 | 3.1 | 60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,2-Dichloroethene | 156-59-2 | 0.25 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,2-Dichloroethene | 156-60-5 | 0.19 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | | Location Name | GPEC-SS325 | GPEC-SS325 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | | Sample Name | GPEC-SS325 | GPEC-SS-XX-10112017 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | | Sample Date | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 3/14/2018 | 3/14/2018 | 10/11/2017 | 3/14/2018 | 3/14/2018 |
| | | | | | Parent Sample | | GPEC-SS325 | | | | | | | | |
| **Analyte** | **CAS No.** | **RESTRICTED USE PoGW** | **Restricted Residential SCO[1]** | **Industrial SCO** | | | | | | | | | | | |
| 1,1-Dichloroethene | 75-35-4 | 0.33 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichloropropane | 78-87-5 | 0.33 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Diisopropyl ether | 108-20-3 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | 1634-04-4 | 0.93 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | 1 | 1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | 75-09-2 | 0.05 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | 100-42-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | 0.6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Tetrachloroethene | 127-18-4 | 1.3 | 19 | 300 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | 6 | 100 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | 3.4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 0.68 | 100 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichloroethene | 79-01-6 | 0.47 | 21 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | 0.34 | 80 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 0.02 | 0.9 | 27 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total VOCs | TVOC | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PAHs (mg/kg)** | | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 98 | 100 | 1000 | **0.131** | **0.052** | **0.035 J** | **0.226** | 0.072 U | **0.097 D** | **0.084** | **0.034 J** | **0.173 D** | **0.092** |
| Acenaphthylene | 208-96-8 | 107 | 100 | 1000 | **0.083** | **0.056** | **0.06** | **0.128** | **0.07 J** | **0.717 D** | **0.079** | **0.048** | **0.092 D** | **0.062** |
| Anthracene | 120-12-7 | 1000 | 100 | 1000 | **0.367** | **0.145** | **0.2** | **0.627** | **0.08** | **0.583 D** | **0.915** | **0.167** | **2.72 D** | **0.209** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 100 | 1000 | **0.156** | **0.278** | **0.157** | **0.544** | **0.211** | **0.169 D** | **0.387** | **0.488** | **1.32 D** | **0.569** |
| Fluoranthene | 206-44-0 | 1000 | 100 | 1000 | **1.88** | **1.01** | **1.46** | **3.65** | **0.315** | **2.8 D** | **1.6** | **1.23** | **6.06 D** | **1.67** |
| Fluorene | 86-73-7 | 386 | 100 | 1000 | **0.16** | **0.047** | 0.036 U | **0.204** | 0.072 U | **0.16 D** | **0.067** | **0.035 J** | **0.156 D** | **0.069** |
| 2-Methylnaphthalene | 91-57-6 | 36.4 | NE | NE | **0.057** | **0.034 J** | 0.036 U | **0.048** | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Naphthalene | 91-20-3 | 12 | 100 | 1000 | **0.116** | **0.062** | 0.036 U | **0.076** | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Phenanthrene | 85-01-8 | 1000 | 100 | 1000 | **1.35** | **0.479** | **0.549** | **2.34** | **0.181** | **1.4 D** | **0.917** | **0.523** | **2.72 D** | **0.913** |
| Pyrene | 129-00-0 | 1000 | 100 | 1000 | **1.7** | **1.02** | **1.39** | **3.43** | **0.344** | **3.2 D** | **1.25** | **1.35** | **4.13 D** | **1.33** |
| Benz[a]anthracene | 56-55-3 | 1 | 1 | 11 | **1.01** | **0.681** | **0.888** | **1.98** | **0.202** | **1.43 D** | **0.731** | **0.999** | **2.4 D** | **0.864** |
| Benzo[a]pyrene | 50-32-8 | 22 | 1 | 1.1 | **0.5** | **0.456** | **0.504** | **1.2** | **0.11** | **1 D** | **0.686** | **0.622** | **2.44 D** | **0.817** |
| Benzo[b]fluoranthene | 205-99-2 | 1.7 | 1 | 11 | **0.371** | **0.369** | **0.465** | **1.02** | **0.126** | **0.725 D** | **0.715** | **0.585** | **3.3 D** | **0.757** |
| Benzo[k]fluoranthene | 207-08-9 | 1.7 | 3.9 | 110 | **0.557** | **0.401** | **0.48** | **1.19** | **0.127** | **0.483 D** | **0.591** | **0.587** | **2.01 D** | **0.812** |
| Chrysene | 218-01-9 | 1 | 3.9 | 110 | **0.992** | **0.679** | **0.826** | **1.94** | **0.247** | **1.82 D** | **0.742** | **0.958** | **2.98 D** | **0.883** |
| Dibenz[a,h]anthracene | 53-70-3 | 1000 | 0.33 | 1.1 | **0.058** | **0.091** | **0.049** | **0.147** | 0.072 U | 0.092 U | **0.156** | **0.14** | **0.624 D** | **0.185** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 8.2 | 0.5 | 11 | **0.166** | **0.24** | **0.196** | **0.486** | **0.127** | **0.338 D** | **0.334** | **0.403** | **1.26 D** | **0.483** |
| Total PAHs | TPAH | NE | NE | NE | **9.654** | **6.1** | **7.259** | **19.236** | **2.14** | **14.922** | **9.254** | **8.169** | **32.385** | **9.715** |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS325 | GPEC-SS325 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Sample Name | GPEC-SS325 | GPEC-SS-XX-10112017 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 3/14/2018 | 3/14/2018 | 10/11/2017 | 3/14/2018 | 3/14/2018 |
| | | | | Parent Sample | | GPEC-SS325 | | | | | | | | |
| Analyte | CAS No. | RESTRICTED USE PoGW | Restricted Residential SCO[1] | Industrial SCO | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | | |
| Aniline | 62-53-3 | 0.33 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Benzidine | 92-87-5 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Benzoic acid | 65-85-0 | 2.7 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | 435 | NE | NE | **0.063** | **0.07** | **0.032 J** | **0.13** | **0.057 J** | **1.63 D** | **0.71** | **0.046** | **0.96 D** | **1.01** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | 122 | NE | NE | 0.034 U | 0.034 U | 0.036 U | **0.051** | 0.072 U | 0.092 U | **0.12** | 0.035 U | **0.113 D** | **0.126** |
| Carbazole | 86-74-8 | NE | NE | NE | **0.139** | **0.032 J** | 0.036 U | **0.155** | 0.072 U | **0.098 D** | **0.089** | **0.031 J** | **0.375 D** | **0.112** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | 0.22 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 6.2 | 59 | 1000 | **0.072** | 0.034 U | 0.036 U | **0.1** | 0.072 U | 0.092 U | **0.042** | 0.035 U | **0.074 DJ** | **0.04 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1.1 | 100 | 1000 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 2.4 | 49 | 560 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 1.8 | 13 | 250 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | 0.4 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | 7.7 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | 27 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | 8.1 | NE | NE | 0.034 U | 0.034 U | 0.036 U | **0.031 J** | 0.072 U | **0.111 D** | 0.041 U | 0.035 U | **0.073 DJ** | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | 0.2 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | 0.17 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | 120 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | **0.25 D** | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Hexachlorobenzene | 118-74-1 | 1.4 | 1.2 | 12 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Hexachlorobutadiene (C-46) | 87-68-3 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Hexachloroethane | 67-72-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Isophorone | 78-59-1 | 4.4 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 0.33 | 100 | 1000 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 0.33 | 100 | 1000 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS325 | GPEC-SS325 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Sample Name | GPEC-SS325 | GPEC-SS-XX-10112017 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 3/14/2018 | 3/14/2018 | 10/11/2017 | 3/14/2018 | 3/14/2018 |
| | | | | Parent Sample | | GPEC-SS325 | | | | | | | | |
| **Analyte** | **CAS No.** | **RESTRICTED USE PoGW** | **Restricted Residential SCO[1]** | **Industrial SCO** | | | | | | | | | | |
| 2-Nitroaniline | 88-74-4 | 0.4 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | 0.5 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Nitrobenzene | 98-95-3 | 0.17 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | 0.3 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | 0.1 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| N-Nitrosodimethylamine (NDMA) | 62-75-9 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| N-Nitrosodi-n-propylamine (NDPA) | 621-64-7 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| N-Nitrosodiphenylamine (NDFA) | 86-30-6 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 0.8 | 6.7 | 55 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Phenol | 108-95-2 | 0.33 | 100 | 1000 | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | 0.1 | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | NE | 0.034 U | 0.034 U | 0.036 U | 0.038 U | 0.072 U | 0.092 U | 0.041 U | 0.035 U | 0.075 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | NE | **9.928** | **6.202** | **7.291** | **19.703** | **2.197** | **17.011** | **10.215** | **8.246** | **33.98** | **11.003** |
| **PCB Aroclors (mg/kg)** | | NE | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | 0.024 U | 0.021 U | 0.106 U | 0.019 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | NE | 0.212 U | 0.106 U | 0.205 U | 0.226 U | 0.216 U | **0.14 D** | **0.146 D** | 0.106 U | **0.159 D** | **0.133 D** |
| Aroclor 1262 | 37324-23-5 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 3.2 | 1 | 25 | ND | ND | ND | ND | ND | **0.14** | **0.146** | ND | **0.159** | **0.133** |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 0.19 | 0.097 | 1.4 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| alpha-BHC (Hexachlorocyclohexane) | 319-84-6 | 0.02 | 0.48 | 6.8 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| beta-BHC (beta-Hexachlorocyclohexane) | 319-85-7 | 0.09 | 0.36 | 14 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| gamma-BHC (gamma-Hexachlorocyclohexane) (Lindane) | 58-89-9 | 0.1 | 1.3 | 23 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| delta-BHC (delta-Hexachlorocyclohexane) | 319-86-8 | 0.25 | 100 | 1000 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NE | 0.265 U | 0.265 U | 0.256 U | 0.282 U | 0.27 U | 0.024 U | 0.021 U | 0.265 U | **0.156 D** | **0.062 D** |
| alpha-Chlordane | 5103-71-9 | 2.9 | 4.2 | 47 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | **0.016 D** | **0.0042 D** |
| gamma-Chlordane | 5103-74-2 | 14 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | **0.00646 D** | **0.00196 D** |
| 4,4-DDD (p,p-DDD) | 72-54-8 | 14 | 13 | 180 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | **0.028 D** | 0.0017 U |
| 4,4'-DDE (p,p'-DDE) | 72-55-9 | 17 | 8.9 | 120 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | **0.00981 D** | **0.00699 D** | 0.021 U | **0.304 D** | **0.017 D** |
| 4,4'-DDT (p,p'-DDT) | 50-29-3 | 136 | 7.9 | 94 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | **0.045 D** | **0.013 D** | 0.021 U | **0.281 D** | **0.036 D** |
| Dieldrin | 60-57-1 | 0.1 | 0.2 | 2.8 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| alpha-Endosulfan (I) | 959-98-8 | 102 | 24 | 920 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |

**Table 9. Surface Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | | Location Name | GPEC-SS325 | GPEC-SS325 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Sample Name | GPEC-SS325 | GPEC-SS-XX-10112017 | GPEC-SS326 | GPEC-SS327 | GPEC-SS328 | GPEC-SS329 | GPEC-SS330 | GPEC-SS331 | GPEC-SS332 | GPEC-SS333 |
| | | | | Start Depth | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| | | | | End Depth | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 10/11/2017 | 3/14/2018 | 3/14/2018 | 10/11/2017 | 3/14/2018 | 3/14/2018 |
| | | | | Parent Sample | | GPEC-SS325 | | | | | | | | |
| **Analyte** | **CAS No.** | **RESTRICTED USE PoGW** | **Restricted Residential SCO[1]** | **Industrial SCO** | | | | | | | | | | |
| beta-Endosulfan (II) | 33213-65-9 | 102 | 24 | 920 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Endosulfan sulfate | 1031-07-8 | 1000 | 24 | 920 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Endrin | 72-20-8 | 0.06 | 11 | 410 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Endrin ketone | 53494-70-5 | NE | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Heptachlor | 76-44-8 | 0.38 | 2.1 | 29 | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Heptachlor epoxide | 1024-57-3 | 0.02 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | **0.00419 D** | 0.0017 U |
| Methoxychlor | 72-43-5 | 900 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.023 U | 0.022 U | 0.00188 U | 0.00164 U | 0.021 U | 0.00151 U | 0.0017 U |
| Toxaphene | 8001-35-2 | NE | NE | NE | 0.265 U | 0.265 U | 0.256 U | 0.282 U | 0.27 U | 0.024 U | 0.021 U | 0.265 U | 0.019 U | 0.021 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | 0.5 | NE | NE | 0.018 U | 0.017 U | 0.018 U | 0.019 U | 0.018 U | 0.024 U | 0.02 U | 0.018 U | 0.018 U | 0.021 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | 1.9 | NE | NE | 0.018 U | 0.017 U | 0.018 U | 0.019 U | 0.018 U | 0.024 U | 0.02 U | 0.018 U | 0.018 U | 0.021 U |
| 2,4,5-TP (Silvex) | 93-72-1 | 3.8 | 100 | 1000 | 0.018 U | 0.017 U | 0.018 U | 0.019 U | 0.018 U | 0.024 U | 0.02 U | 0.018 U | 0.018 U | 0.021 U |
| **Metals (mg/kg)** | | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | NE | **7730** | **6960** | **7820** | **11700** | **5760** | **8680** | **7850** | **7270** | **8990** | **8520** |
| Antimony | 7440-36-0 | NE | NE | NE | **0.598** | **0.432 J** | **0.402 J** | **1.21** | **0.617** | **5.15** | **2.24** | **1.04** | **2.74** | **3.71** |
| Arsenic | 7440-38-2 | 16 | 16 | 16 | **3.72** | **3.18** | **2.98** | **6.11** | **3.42** | **14.7** | **12.1** | **4.83** | **12.8** | **10.8** |
| Barium | 7440-39-3 | 820 | 400 | 10000 | **66.5** | **63.5** | **55.3** | **104** | **54.3** | **171** | **111** | **59.8** | **183** | **146** |
| Beryllium | 7440-41-7 | 47 | 72 | 2700 | **0.498 J** | **0.385 J** | **0.439 J** | **0.697** | **0.373 J** | **0.771** | **0.693** | **0.374 J** | **0.662** | **0.619 J** |
| Cadmium | 7440-43-9 | 7.5 | 4.3 | 60 | 0.577 U | 0.569 U | 0.575 U | **0.618 J** | 0.576 U | **2.26** | **1.1** | **0.34 J** | **1.95** | **2.19** |
| Calcium | 7440-70-2 | NE | NE | NE | **11800** | **9670** | **9180** | **9400** | **51200** | **6250** | **4490** | **10300** | **3830** | **3640** |
| Chromium | 7440-47-3 | NE | NE | NE | **20.9** | **21.6** | **18.4** | **26.5** | **15.7** | **43.4** | **37.2** | **17.8** | **60.2** | **41.3** |
| Hexavalent Chromuim (Cr VI) | 18540-29-9 | 19 | 110 | 800 | 1.07 U | 1.06 U | 1.1 U | 1.18 U | 1.11 U | 1.43 U | 1.25 U | 1.09 U | 1.14 U | 1.3 U |
| Cobalt | 7440-48-4 | NE | NE | NE | **6.72** | **5.93** | **6.6** | **8.37** | **4.87** | **9.01** | **5.74** | **5.41** | **7.26** | **7.1** |
| Copper | 7440-50-8 | 1720 | 270 | 10000 | **35.2** | **27.3** | **26.5** | **49.7** | **30** | **247** | **114** | **32.7** | **209** | **181** |
| Iron | 7439-89-6 | NE | NE | NE | **18100** | **15200** | **17100** | **22200** | **15600** | **19900** | **18500** | **17200** | **19900** | **22200** |
| Lead | 7439-92-1 | 450 | 400 | 3900 | **88.8** | **72.5** | **50.1** | **146** | **27.9** | **439** | **261** | **59.8** | **376** | **323** |
| Magnesium | 7439-95-4 | NE | NE | NE | **6400** | **5610** | **4370** | **5750** | **17900** | **2710** | **2180** | **4190** | **2520** | **2380** |
| Manganese | 7439-96-5 | 2000 | 2000 | 10000 | **268** | **230** | **262** | **372** | **236** | **312** | **229** | **252** | **331** | **297** |
| Mercury | 7439-97-6 | 0.73 | 0.81 | 5.7 | **0.14** | **0.12** | **0.088** | **0.252** | **0.062** | **0.641** | **0.292** | **0.167** | **0.54** | **0.365** |
| Nickel | 7440-02-0 | 130 | 310 | 10000 | **26.2** | **21.8** | **19.6** | **26.9** | **13** | **39.9** | **25.6** | **15.7** | **31.1** | **29.5** |
| Potassium | 7440-09-7 | NE | NE | NE | **1060** | **995** | **1060** | **1510** | **1500** | **801** | **1030** | **989** | **1130** | **1450** |
| Selenium | 7782-49-2 | 4 | 180 | 6800 | **2** | **2.22** | **1.11** | **1.86** | **1.56** | **2.42** | **1.16** | **1.57** | **2.4** | **2.28** |
| Silver | 7440-22-4 | 8.3 | 180 | 6800 | 0.577 U | 0.569 U | 0.575 U | 0.633 U | 0.576 U | **0.784** | **0.449 J** | 0.545 U | **0.654** | **0.741** |
| Sodium | 7440-23-5 | NE | NE | NE | **123** | **105** | **203** | **178** | **267** | **202** | **81.1** | **141** | **133** | **143** |
| Thallium | 7440-28-0 | NE | NE | NE | 0.577 U | 0.569 U | 0.575 U | 0.633 U | 0.576 U | **0.415 J** | **0.293 J** | 0.545 U | 0.601 U | 0.7 U |
| Vanadium | 7440-62-2 | NE | NE | NE | **29.2** | **25.6** | **32** | **37.4** | **37.7** | **50.4** | **30.4** | **26.4** | **47.9** | **44.8** |
| Zinc | 7440-66-6 | 2480 | 10000 | 10000 | **106** | **76.5** | **83.8** | **187** | **66.7** | **1460** | **331** | **108** | **525** | **588** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NE | 2.7 U | 2.6 U | 2.7 U | 3 U | 2.8 U | 3.57 U | 3.13 U | 2.7 U | 2.86 U | 3.26 U |
| **Other (mg/kg)** | | | | | | | | | | | | | | |
| Total Organic Carbon | TOC | NE | NE | NE | **35800** | **26500** | **16600** | **38700** | **5030** | **71000** | **33000** | **16300** | **39000** | **52000** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-GT09 (CPT) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT23 (CPT) | GPEC-GT23 (CPT) |
| | | | Sample Name | GPEC-GT-9 (8) | GPEC-GT-10 (8) | GPEC-GT-10 (45-47) | GPEC-GT-10 (120-122) | GPEC-GT-23 (3-4) | GPEC-GT-XX |
| | | | Start Depth | 8 | 8 | 45 | 120 | 3 | 3 |
| | | | End Depth | 8 | 8 | 47 | 122 | 4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/10/2009 | 8/10/2009 | 8/17/2009 | 8/19/2009 | 10/7/2009 | 10/7/2009 |
| | | | Parent Sample Code | | | | | | GPEC-GT-23 (3-4) |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | **13** | **13** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | **28** | **33** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | **11** | **5 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | **65** | **76** |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | **117** | **127** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.025 U | 0.031 UJ | 0.025 U | 0.024 U | 15 U | 17 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Bromoform | 75-25-2 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 6 U | 6.6 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 UJ | 6 U | 6.6 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 UJ | 6 U | 6.6 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 6 U | 6.6 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.025 U | 0.025 UJ | 0.025 U | 0.024 U | 6 U | 6.6 U |
| Styrene | 100-42-5 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | **8.4** | **11** |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0062 U | 0.0061 U | 0.0062 U | 0.0059 U | 6 U | 6.6 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | ND | **125.4** | **138** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.089 J** | **0.046 J** | 0.33 U | 0.31 U | **360 J** | **170 J** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.39** | **0.58** | **0.026 J** | 0.31 U | **3300 J** | **1500 J** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.41** | **0.43** | 0.33 U | 0.31 U | **4300 J** | **2000 J** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.2** | **1.3** | 0.33 U | 0.31 U | **740 J** | **320 J** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **2.5** | **0.59** | 0.33 U | 0.31 U | **7000 J** | **3600 J** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.11 J** | **0.087 J** | 0.33 U | 0.31 U | **4800 J** | **2300 J** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.071 J** | **0.03 J** | **0.021 J** | 0.31 U | **4100 J** | **2000 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-GT09 (CPT) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT23 (CPT) | GPEC-GT23 (CPT) |
| | | | Sample Name | GPEC-GT-9 (8) | GPEC-GT-10 (8) | GPEC-GT-10 (45-47) | GPEC-GT-10 (120-122) | GPEC-GT-23 (3-4) | GPEC-GT-XX |
| | | | Start Depth | 8 | 8 | 45 | 120 | 3 | 3 |
| | | | End Depth | 8 | 8 | 47 | 122 | 4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/10/2009 | 8/10/2009 | 8/17/2009 | 8/19/2009 | 10/7/2009 | 10/7/2009 |
| | | | Parent Sample Code | | | | | | GPEC-GT-23 (3-4) |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.52** | **0.031 J** | **0.077 J** | 0.31 U | **14000 J** | **6800 J** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.7** | **0.32 J** | **0.026 J** | 0.31 U | **11000 J** | **5900 J** |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.1** | **1.2** | 0.33 U | 0.31 U | **4700 J** | **2300 J** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.7** | **0.82** | 0.33 U | 0.31 U | **2900 J** | **1500 J** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.8** | **1.1** | 0.33 U | 0.31 U | **2400 J** | **1200 J** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **2.2** | **1.1** | 0.33 U | 0.31 U | **2700 J** | **1500 J** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.78** | **0.37** | 0.33 U | 0.31 U | **1200** | **610 J** |
| Chrysene | 218-01-9 | 110 | 1 | **1.8** | **0.85** | 0.33 U | 0.31 U | **2600 J** | **1300 J** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.47** | **0.31 J** | 0.33 U | 0.31 U | **250 J** | **140 J** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **2** | **1.1** | 0.33 U | 0.31 U | **1000** | **460 J** |
| Total PAHs | TPAH | NE | NE | **21.84** | **10.264** | **0.15** | ND | **67350** | **33600** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.42 U | 0.33 U | **0.049 J** | **0.22 J** | 800 U | 700 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Carbazole | 86-74-8 | NE | NE | **0.083 J** | 0.33 U | 0.33 U | 0.31 U | **1700 J** | **820 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.11 J** | **0.031 J** | 0.33 U | 0.31 U | **2900 J** | **1500 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.82 U | 0.82 U | 0.81 U | 0.78 U | 980 UJ | 860 UJ |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | **40 J** | 700 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2.1 U | 2.1 U | 2.1 U | 2 U | 5100 U | 4400 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2.1 U | 2.1 U | 2.1 U | 2 U | 5100 U | 4400 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.82 U | 0.82 U | 0.81 U | 0.78 U | 2000 U | 1700 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | **140 J** | **63 J** |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 2.1 U | 2.1 U | 2.1 U | 2 U | 2000 U | 1700 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 2.1 U | 2.1 U | 2.1 U | 2 U | 2000 U | 1700 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2.1 U | 2.1 U | 2.1 U | 2 U | 5100 U | 4400 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2.1 U | 2.1 U | 2.1 U | 2 U | 2000 U | 1700 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.33 U | 0.33 U | 0.33 U | 0.31 U | **100 J** | 700 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 2.1 U | 2.1 U | 2.1 U | 2 U | 5100 U | 4400 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.33 U | 0.33 U | 0.33 U | 0.31 U | 800 U | 700 U |
| Total SVOCs | TSVOC | NE | NE | **22.033** | **10.295** | **0.199** | **0.22** | **72230** | **35983** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-GT09 (CPT) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT10D (MW) | GPEC-GT23 (CPT) | GPEC-GT23 (CPT) |
| | | | Sample Name | GPEC-GT-9 (8) | GPEC-GT-10 (8) | GPEC-GT-10 (45-47) | GPEC-GT-10 (120-122) | GPEC-GT-23 (3-4) | GPEC-GT-XX |
| | | | Start Depth | 8 | 8 | 45 | 120 | 3 | 3 |
| | | | End Depth | 8 | 8 | 47 | 122 | 4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/10/2009 | 8/10/2009 | 8/17/2009 | 8/19/2009 | 10/7/2009 | 10/7/2009 |
| | | | Parent Sample Code | | | | | | GPEC-GT-23 (3-4) |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.021 U | 0.021 U | 0.02 U | 0.021 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6650** | **5970** | **4080** | **3350** | **2580** | **2840** |
| Antimony | 7440-36-0 | NE | NE | 5 UJ | 4.9 UJ | 5 UJ | 4.7 UJ | 4.9 UJ | **4.5 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **23** | 6.3 U | 6.4 U | 5.9 U | **6.9** | **16.3 J** |
| Barium | 7440-39-3 | 10000 | 820 | **293 J** | **58.4 J** | **28.3 J** | **19.8 J** | **78.2** | **89.8** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.48 J** | **0.42 J** | **0.28 J** | **0.14 J** | **0.42 J** | **0.31 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.5 UJ | 1.5 U | 1.5 U | 1.4 U | **0.35 J** | **0.66 J** |
| Calcium | 7440-70-2 | NE | NE | **17500 J** | **3430 J** | **15600 J** | **644 J** | **4660** | **6710** |
| Chromium | 7440-47-3 | NE | NE | **20.2 J** | **11.8 J** | **9.7 J** | **6.5 J** | **5.9** | **5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1 U | 1 U | 1 U | 1 U | **1.3** | **1.1** |
| Cobalt | 7440-48-4 | NE | NE | **5.2** | **4.7** | **4** | **4.4** | **2.9 J** | **28.9 J** |
| Copper | 7440-50-8 | 10000 | 1720 | **73.9 J** | **37.8 J** | **9.6 J** | 3.3 UJ | **88.8 J** | **410 J** |
| Iron | 7439-89-6 | NE | NE | **27300 J** | **9010 J** | **8250 J** | **12000 J** | **5510 J** | **42800 J** |
| Lead | 7439-92-1 | 3900 | 450 | **854 J** | **67.8 J** | 4.7 UJ | 5.5 UJ | **171 J** | **500 J** |
| Magnesium | 7439-95-4 | NE | NE | **2230** | **2330** | **7810** | **1350** | **1290 J** | **757 J** |
| Manganese | 7439-96-5 | 10000 | 2000 | **316** | **175** | **227** | **240** | **80.9** | **89.2** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.97** | **0.22** | 0.057 U | 0.058 U | **0.54** | **0.38** |
| Nickel | 7440-02-0 | 10000 | 130 | **14.5 J** | **17 J** | **9.5 J** | **6.8 J** | **9 J** | **26.8 J** |
| Potassium | 7440-09-7 | NE | NE | **622 J** | **641 J** | **1260 J** | **432 J** | **344 J** | **533 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 11.3 U | 11.2 U | 11.4 U | 10.6 U | 11.2 U | 12.1 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.25 J** | 1.5 U | 1.5 U | 1.4 U | **0.14 J** | 1.6 UJ |
| Sodium | 7440-23-5 | NE | NE | **289** | **80.9** | **111** | **148** | **278** | **280 J** |
| Thallium | 7440-28-0 | NE | NE | 4.5 U | 4.5 U | 4.6 U | 4.2 U | 4.5 U | 4.8 UJ |
| Vanadium | 7440-62-2 | NE | NE | **22.9** | **14.6** | **14.2** | **6.1** | **8.1** | **5.1 J** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1110 J** | **58.4 J** | **23.5 J** | **23.7 J** | **135 J** | **1410 J** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.246 U | 0.245 U | 0.244 U | 0.234 U | **0.503** | **0.104 J** |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **79.4** | **76.7** | **76.3** | **77.2** | **83.1** | **70.1** |
| Total Organic Carbon | TOC | NE | NE | **34200** | **13300** | **8470** | **2020** | **531000 J** | **180000 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB01 | GPEC-SB01B/MW-1 | GPEC-SB01B/MW-1 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 | |
| | | | Sample Name | GPEC-SB-1 (7.5-8) | GPEC-SB-1B (52-54) | GPEC-SB-1B (98-100) | GPEC-SB-103 (4-5) | GPEC-SB-103 (56-57) | GPEC-SBXX051910 | GPEC-SB-103 (119-120) | |
| | | | Start Depth | 7.5 | 52 | 98 | 4 | 56 | 56 | 119 | |
| | | | End Depth | 8 | 54 | 100 | 5 | 57 | 57 | 120 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 3/30/2009 | 4/9/2009 | 4/10/2009 | 5/14/2010 | 5/19/2010 | 5/19/2010 | 5/21/2010 | |
| | | | Parent Sample Code | | | | | | GPEC-SB-103 (56-57) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0058 U | **1.8** | **0.00083 J** | 0.0042 U | 0.44 U | 2.2 U | 0.0044 U | |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0058 U | **7.1** | 0.0057 U | 0.0028 U | **0.85** | **1.4 J** | 0.0029 U | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | 0.0056 U | **0.66** | 3 U | 0.0058 U | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | 0.0056 U | **0.32 J** | 3 U | 0.0058 U | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0058 U | **15** | **0.00055 J** | NA | NA | NA | NA | |
| Total BTEX | TBTEX | NE | NE | ND | **23.9** | **0.00138** | ND | **1.83** | **1.4** | ND | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.0057 J** | 1.4 UJ | 0.024 UJ | 0.1 U | 10 U | 54 U | 0.1 U | |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | 0.069 UJ | R | R | R | |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Bromoform | 75-25-2 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.011 U | 1.2 U | 6 U | 0.012 U | |
| Bromomethane | 74-83-9 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | R | 0.59 U | 3 U | 0.0058 U | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.57 U | 0.011 U | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | R | R | R | R | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0058 UJ | 0.57 U | 0.0057 U | 0.028 UJ | 2.9 U | 15 U | 0.029 U | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0058 U | 0.57 U | 0.0057 U | 0.0056 U | 0.59 U | 3 U | 0.0058 U | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0058 U | 0.57 U | 0.0057 U | 0.0042 U | 0.44 U | 2.2 U | 0.0044 U | |
| Chloromethane | 74-87-3 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.014 U | 1.5 U | 7.4 U | 0.014 U | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | 0.028 U | 2.9 UJ | 15 UJ | 0.029 UJ | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0058 U | 0.57 U | 0.0057 U | 0.0042 U | 0.44 U | 2.2 U | 0.0044 U | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0058 U | 0.57 U | 0.0057 U | 0.0042 U | 0.44 U | 2.2 U | 0.0044 U | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0058 U | 0.57 U | 0.0057 U | 0.0097 U | 1 U | 5.2 U | 0.01 U | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | 0.011 U | 1.2 U | 6 U | 0.012 U | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.57 U | 0.011 U | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | 0.0056 U | 0.59 U | 3 U | 0.0058 U | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0058 U | 0.57 U | 0.0057 U | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.023 U | 0.57 U | 0.023 U | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| Styrene | 100-42-5 | NE | NE | 0.0058 U | **6.6** | 0.0057 U | 0.0056 U | 0.59 U | 3 U | 0.0058 U | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | 0.056 U | 5.9 U | 30 U | 0.058 U | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | 0.014 U | 1.5 U | 7.4 U | 0.014 U | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0058 U | 0.57 U | 0.0057 U | 0.0042 U | 0.44 U | 2.2 U | 0.0044 U | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0058 U | 0.57 U | 0.0057 U | 0.0028 U | 0.29 U | 1.5 U | 0.0029 U | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | 0.014 U | 1.5 U | 7.4 U | 0.014 U | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | 0.028 U | 2.9 U | 15 U | 0.029 U | |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | R | 2.9 U | 15 U | 0.029 U | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0058 U | 0.57 U | 0.0057 U | 0.0056 U | 0.59 U | 3 U | 0.0058 U | |
| Total VOCs | TVOC | NE | NE | **0.0057** | **30.5** | **0.00138** | ND | **1.83** | **1.4** | ND | |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.044 J** | **15 J** | 0.3 U | **0.0118 J** | **15.3 J** | **1.43 J** | 0.212 U | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.31 U | **130** | 0.3 U | **0.0549 J** | **2.11** | **0.205 J** | 0.212 U | |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.098 J** | **64** | 0.3 U | **0.051 J** | **7.4 J** | **0.731 J** | 0.212 U | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.41** | **7.5 J** | 0.3 U | **0.172 J** | **1.36 J** | **0.145 J** | 0.212 U | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.44** | **61** | 0.3 U | **0.368** | **7.57 J** | **0.752 J** | 0.212 U | |
| Fluorene | 86-73-7 | 1000 | 386 | **0.04 J** | **70** | 0.3 U | **0.00784 J** | **8.1 J** | **0.722 J** | 0.212 U | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.019 J** | **420** | **0.013 J** | **0.0157 J** | **38.2 J** | **3.04 J** | 0.212 U | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB01 | GPEC-SB01B/MW-1 | GPEC-SB01B/MW-1 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 |
| | | | Sample Name | GPEC-SB-1 (7.5-8) | GPEC-SB-1B (52-54) | GPEC-SB-1B (98-100) | GPEC-SB-103 (4-5) | GPEC-SB-103 (56-57) | GPEC-SBXX051910 | GPEC-SB-103 (119-120) |
| | | | Start Depth | 7.5 | 52 | 98 | 4 | 56 | 56 | 119 |
| | | | End Depth | 8 | 54 | 100 | 5 | 57 | 57 | 120 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/30/2009 | 4/9/2009 | 4/10/2009 | 5/14/2010 | 5/19/2010 | 5/19/2010 | 5/21/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB-103 (56-57) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.051 J** | **670** | **0.031 J** | **0.0353 J** | **71.2 J** | **4.89 J** | 0.212 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.33** | **240** | **0.021 J** | **0.157 J** | **26.8 J** | **2.62 J** | 0.212 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.52** | **120** | 0.3 U | **0.368** | **13.2 J** | **1.33 J** | 0.212 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.26 J** | **35 J** | 0.3 U | **0.223** | **4.05 J** | **0.402** | 0.212 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.28 J** | **36 J** | 0.3 U | **0.223** | **3.39 J** | **0.342** | 0.212 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.28 J** | **21 J** | 0.3 U | **0.219** | **1.86 J** | **0.141 J** | 0.212 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.11 J** | **7.3 J** | 0.3 U | **0.184 J** | **1.32 J** | **0.175 J** | 0.212 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.23 J** | **28 J** | 0.3 U | **0.235** | **3.43** | **0.338** | 0.212 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.27 J** | 60 U | 0.3 U | **0.0588 J** | **0.372 J** | **0.0427 J** | 0.212 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.37** | **6.5 J** | 0.3 UJ | **0.145 J** | **0.992 J** | **0.102 J** | 0.212 U |
| Total PAHs | TPAH | NE | NE | **3.752** | **1931.3** | **0.065** | **2.52934** | **206.654** | **17.4077** | ND |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | R | R | R | R |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | R | R | R | R |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.31 U | 60 U | **0.05 J** | **0.0431 J** | 2.07 U | 0.214 U | **0.0595 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Carbazole | 86-74-8 | NE | NE | **0.025 J** | 60 U | 0.3 U | **0.0118 J** | **0.124 J** | **0.0128 J** | 0.212 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.03 J** | **14 J** | 0.3 U | **0.0118 J** | **1.49 J** | **0.145 J** | 0.212 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.77 U | 150 U | 0.74 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2 U | 380 U | 1.9 U | 0.784 U | 8.27 U | 0.855 U | 0.85 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2 U | 380 U | 1.9 U | 0.784 UJ | R | 0.855 UJ | 0.85 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.77 U | 150 U | 0.74 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 2 U | 380 U | 1.9 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 2 U | 380 U | 1.9 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2 U | 380 U | 1.9 U | 0.392 U | 4.14 U | 0.427 U | 0.425 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2 U | 380 U | 1.9 U | 0.784 UJ | 8.27 UJ | 0.855 UJ | 0.85 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 2 U | 380 U | 1.9 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.31 U | 60 U | 0.3 U | 0.196 U | 2.07 U | 0.214 U | 0.212 U |
| Total SVOCs | TSVOC | NE | NE | **3.807** | **1945.3** | **0.115** | **2.59604** | **208.268** | **17.5655** | **0.0595** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB01 | GPEC-SB01B/MW-1 | GPEC-SB01B/MW-1 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 | GPEC-SB103 |
| | | | Sample Name | GPEC-SB-1 (7.5-8) | GPEC-SB-1B (52-54) | GPEC-SB-1B (98-100) | GPEC-SB-103 (4-5) | GPEC-SB-103 (56-57) | GPEC-SBXX051910 | GPEC-SB-103 (119-120) |
| | | | Start Depth | 7.5 | 52 | 98 | 4 | 56 | 56 | 119 |
| | | | End Depth | 8 | 54 | 100 | 5 | 57 | 57 | 120 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/30/2009 | 4/9/2009 | 4/10/2009 | 5/14/2010 | 5/19/2010 | 5/19/2010 | 5/21/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB-103 (56-57) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.02 U | **0.011 J** | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.02 U | 0.019 U | 0.019 U | 0.0387 U | 0.0192 U | 0.0188 U | 0.0192 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.011** | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4940** | **2460** | **1890** | **920 J** | **2500 J** | **2500 J** | **10000 J** |
| Antimony | 7440-36-0 | NE | NE | 4.8 UJ | 4.5 UJ | 4.6 UJ | 2 UJ | 2.2 UJ | 2.1 UJ | **0.89 J** |
| Arsenic | 7440-38-2 | 16 | 16 | 6 U | 5.7 UJ | 5.9 UJ | **1.2 J** | **0.49** | **0.63 J** | **6.6 J** |
| Barium | 7440-39-3 | 10000 | 820 | **39.1** | **17.1** | **11.5** | **3.7 J** | **11 J** | **12 J** | **58 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.35 J** | **0.14 J** | **0.12 J** | **0.1 J** | **0.39** | **0.37** | **0.86** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.4 U | 1.4 U | 1.4 U | 0.41 U | 0.44 U | 0.42 U | 0.41 U |
| Calcium | 7440-70-2 | NE | NE | **2800 J** | **7460** | **7070** | **120 J** | **6800 J** | **9900 J** | **1400 J** |
| Chromium | 7440-47-3 | NE | NE | **10.6 J** | **8.2** | **5.7** | **2 J** | **5.9 J** | **6.5 J** | **20 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.97 UJ | 0.89 U | 0.9 U | 0.89 U | 0.94 UJ | 0.95 U | 0.93 U |
| Cobalt | 7440-48-4 | NE | NE | **3.8** | **2.7** | **2.2** | **0.74 J** | **2.7** | **3.4 J** | **14 J** |
| Copper | 7440-50-8 | 10000 | 1720 | **13.6** | **9.8 J** | **5.4 J** | **4.4 J** | **6.8** | **5.7 J** | **18 J** |
| Iron | 7439-89-6 | NE | NE | **7530** | **6800 J** | **9900 J** | **2100 J** | **6000 J** | R | R |
| Lead | 7439-92-1 | 3900 | 450 | **40.4** | 4.1 U | 4.2 U | **4.6 J** | **4.4** | **4.7 J** | **23 J** |
| Magnesium | 7439-95-4 | NE | NE | **2310 J** | **5180** | **3820** | **140 J** | **4800 J** | **6100 J** | **4000 J** |
| Manganese | 7439-96-5 | 10000 | 2000 | **159** | **129 J** | **293 J** | **36 J** | **110 J** | **140 J** | **520 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.071** | 0.57 U | 0.054 U | 0.078 UJ | 0.049 UJ | 0.044 UJ | **0.007 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **15.8** | **6.5 J** | **4.3 J** | **1.5 J** | **6.7 J** | **8 J** | **22 J** |
| Potassium | 7440-09-7 | NE | NE | **714** | **443 J** | **278 J** | **100 J** | **710 J** | **820** | **2700** |
| Selenium | 7782-49-2 | 6800 | 4 | 10.8 UJ | 10.2 UJ | 10.6 UJ | 0.82 U | 0.87 U | 0.84 U | 0.82 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.4 U | 1.4 U | 1.4 U | 0.41 U | **0.15 J** | **0.086 J** | **0.2 J** |
| Sodium | 7440-23-5 | NE | NE | **230 J** | **157** | **257** | **39 J** | **95** | **140** | **1500** |
| Thallium | 7440-28-0 | NE | NE | **0.99 J** | **1.1 J** | **2.3 J** | 0.82 U | 0.87 U | 0.84 U | **0.61 J** |
| Vanadium | 7440-62-2 | NE | NE | **10.1 J** | **11** | **6.6** | **3 J** | **12 J** | 12 U | **22 J** |
| Zinc | 7440-66-6 | 10000 | 2480 | **29.6 J** | **11.9 J** | **9 J** | **6.2** | **14 J** | 16 U | **59 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | **0.046 J** | 0.23 U | 0.22 U | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **82.9** | **89.8** | **88.5** | **90** | **85** | **84** | **86** |
| Total Organic Carbon | TOC | NE | NE | **5800** | **12300** | **5270** | **0.266** | **0.156 J** | **0.125 J** | **0.477 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 1** | **Area 1** | **Area 1** | **Area 1** | **Area 1** | **Area 1** |
| **Investigation Phase** | | | | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** |
| **Location Name** | | | | **GPEC-SB202** | **GPEC-SB202** | **GPEC-SB202** | **GPEC-SB202** | **GPEC-SB203** | **GPEC-SB203** |
| **Sample Name** | | | | **GPEC-SB202 (5-6)** | **GPEC-SB202 (22-23)** | **GPEC-SB202 (80-81)** | **GPGC-XX111211** | **GPEC-SB203 (6-7)** | **GPEC-SB203 (29-30)** |
| **Start Depth** | | | | **5** | **22** | **80** | **80** | **6** | **29** |
| **End Depth** | | | | **6** | **23** | **81** | **81** | **7** | **30** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **11/12/2011** | **11/12/2011** | **11/12/2011** | **11/12/2011** | **6/25/2012** | **7/11/2012** |
| **Parent Sample Code** | | | | | | | **GPGC-SB-202 (80-81)** | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.001 U | **0.091 J** | 0.0012 U | 0.001 U | 0.00566 U | **0.325 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.001 U | **0.0023 J** | 0.0012 U | 0.001 U | 0.00566 U | **22.2** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0031 U | 0.012 UJ | 0.0035 U | 0.0031 U | 0.011 U | **8.16** |
| Total BTEX | TBTEX | NE | NE | ND | **0.0933** | ND | ND | ND | **30.685** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.04 J** | **0.74 J** | **0.071 J** | **0.053 J** | 0.028 U | 1.56 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Bromoform | 75-25-2 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Bromomethane | 74-83-9 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.0012 J** | **0.063 J** | 0.012 U | 0.01 U | 0.028 U | 0.779 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.001 U | **0.06 J** | **0.001 J** | **0.0013** | 0.00566 U | **1.19** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.001 U | **0.0014 J** | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Chloromethane | 74-87-3 | NE | NE | 0.001 UJ | 0.004 UJ | 0.0012 UJ | 0.001 UJ | 0.00566 U | 0.779 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.011 U | 0.779 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 1.56 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.01 U | 0.04 UJ | 0.012 U | 0.01 U | 0.011 U | 0.779 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.01 U | **0.0039 J** | 0.012 U | 0.01 U | 0.00566 U | 0.779 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.035 J** | **0.29 J** | **0.027 J** | **0.019 J** | 0.011 U | 1.56 U |
| Styrene | 100-42-5 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.001 U | 0.004 UJ | **0.0024** | 0.001 U | 0.00566 U | 0.779 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.001 U | 0.004 UJ | 0.0012 U | 0.001 U | 0.00566 U | 0.779 U |
| Total VOCs | TVOC | NE | NE | **0.0762** | **1.2516** | **0.1014** | **0.0733** | ND | **31.875** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.045** | **20.5** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.043** | **0.972 J** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.113** | **5.23** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.14 J** | 1.4 UJ | 0.39 U | 0.36 U | **0.148** | **1.41** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.31 J** | 1.4 UJ | 0.39 U | 0.36 U | **0.601** | **8.57** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.049** | **8.13** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | **41.7** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB202 | GPEC-SB202 | GPEC-SB202 | GPEC-SB202 | GPEC-SB203 | GPEC-SB203 |
| | | | Sample Name | GPEC-SB202 (5-6) | GPEC-SB202 (22-23) | GPEC-SB202 (80-81) | GPGC-XX111211 | GPEC-SB203 (6-7) | GPEC-SB203 (29-30) |
| | | | Start Depth | 5 | 22 | 80 | 80 | 6 | 29 |
| | | | End Depth | 6 | 23 | 81 | 81 | 7 | 30 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/12/2011 | 11/12/2011 | 11/12/2011 | 11/12/2011 | 6/25/2012 | 7/11/2012 |
| | | | Parent Sample Code | | | | GPGC-SB-202 (80-81) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.083** | **109** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.14 J** | 1.4 UJ | 0.39 U | 0.36 U | **0.368** | **20.6** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.3 J** | 1.4 UJ | 0.39 U | 0.36 U | **0.466** | **10.7** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.18** | 0.14 UJ | 0.039 U | 0.036 U | **0.254** | **4.64** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.2** | 0.14 UJ | 0.039 U | 0.036 U | **0.287** | **2.55** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.28** | 0.14 UJ | 0.039 U | 0.036 U | **0.253** | **1.57** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.079** | 0.14 UJ | 0.039 U | 0.036 U | **0.226** | **1.24** |
| Chrysene | 218-01-9 | 110 | 1 | **0.2 J** | 1.4 UJ | 0.39 U | 0.36 U | **0.281** | **4.94** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | **0.062** | 1.03 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.099** | 0.14 UJ | 0.039 U | 0.036 U | **0.131** | **0.996 J** |
| Total PAHs | TPAH | NE | NE | **1.928** | ND | ND | ND | **3.41** | **242.748** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.036 UJ | 0.14 UJ | 0.039 UJ | 0.036 UJ | 0.037 U | 1.03 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.158** | 1.03 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Carbazole | 86-74-8 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | **0.043** | 1.03 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | **1.33** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.73 U | 2.8 UJ | 0.8 U | 0.74 U | 0.037 U | 1.03 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.1 U | 4.2 UJ | 1.2 U | 1.1 U | 0.037 U | 1.03 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.1 U | 4.2 UJ | 1.2 U | 1.1 U | 0.037 U | 1.03 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.074 U | 0.037 U | 1.03 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.073 U | 0.28 UJ | 0.08 U | 0.074 U | 0.037 U | 1.03 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | 0.037 U | 1.03 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.074 U | 0.037 U | 1.03 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.36 UJ | 1.4 UJ | 0.39 UJ | 0.36 UJ | R | 1.03 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | 0.037 U | 1.03 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.36 U | **5.1 J** | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.73 U | 2.8 UJ | 0.8 U | 0.74 U | 0.037 U | 1.03 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.73 U | 2.8 UJ | 0.8 U | 0.74 U | 0.037 U | 1.03 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.73 U | 2.8 UJ | 0.8 U | 0.74 U | 0.037 U | 1.03 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | 0.037 U | 1.03 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.1 U | 4.2 UJ | 1.2 U | 1.1 U | 0.037 U | 1.03 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | 0.037 U | 1.03 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.1 U | 4.2 UJ | 1.2 U | 1.1 U | 0.037 U | 1.03 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.36 U | **1 J** | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.036 U | 0.14 UJ | 0.039 U | 0.036 U | 0.037 U | 1.03 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.36 U | 1.4 UJ | 0.39 U | 0.36 U | 0.037 U | 1.03 U |
| Total SVOCs | TSVOC | NE | NE | **1.928** | **6.1** | ND | ND | **3.611** | **244.078** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB202 | GPEC-SB202 | GPEC-SB202 | GPEC-SB202 | GPEC-SB203 | GPEC-SB203 |
| | | | Sample Name | GPEC-SB202 (5-6) | GPEC-SB202 (22-23) | GPEC-SB202 (80-81) | GPGC-XX111211 | GPEC-SB203 (6-7) | GPEC-SB203 (29-30) |
| | | | Start Depth | 5 | 22 | 80 | 80 | 6 | 29 |
| | | | End Depth | 6 | 23 | 81 | 81 | 7 | 30 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/12/2011 | 11/12/2011 | 11/12/2011 | 11/12/2011 | 6/25/2012 | 7/11/2012 |
| | | | Parent Sample Code | | | | GPGC-SB-202 (80-81) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.073 U | 0.28 UJ | 0.08 U | 0.073 U | 0.021 U | 0.031 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | 0.052 U | NA |
| Chlordane | 57-74-9 | NE | NE | 0.073 U | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.0073 U | NA | NA | NA | **0.00263 J** | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.0073 U | NA | NA | NA | 0.00417 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.073 U | NA | NA | NA | 0.052 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | 0.018 U | NA | NA | NA | 0.053 U | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8230** | **4080 J** | **2510** | **2390** | **5750** | **13700** |
| Antimony | 7440-36-0 | NE | NE | **28.9** | 8.4 UJ | 2.3 U | 2 U | 1.22 U | **1 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **3.9** | 4.2 UJ | 1.2 UJ | 1 UJ | **1.92** | **108** |
| Barium | 7440-39-3 | 10000 | 820 | **114** | **12.1 J** | **26.9 J** | **18.3 J** | **49.4** | **308** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.4 J** | 1.7 UJ | **0.17 J** | **0.15 J** | **0.369 J** | **0.604 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.41 J** | 4.2 UJ | 1.2 U | 1 U | **0.287 J** | **2.86** |
| Calcium | 7440-70-2 | NE | NE | **5210** | **5550 J** | **9160** | **8630** | **3430** | **6770** |
| Chromium | 7440-47-3 | NE | NE | **18.2** | **13.8 J** | **6.8** | **7.3** | **12.6** | **162** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **0.88 J** | 8.3 U | 2.4 UJ | **7.1 J** | 1.13 U | R |
| Cobalt | 7440-48-4 | NE | NE | **6.8 J** | 41.8 UJ | **3.9 J** | **4 J** | **4.68** | **24.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **107** | 20.9 UJ | **9.3** | **10.6** | **27.2** | **1070** |
| Iron | 7439-89-6 | NE | NE | **17500** | **12700 J** | **9980** | **12800** | **10500** | **26300** |
| Lead | 7439-92-1 | 3900 | 450 | **251** | **6.1 J** | **2.7** | **3.2** | **46.7** | **456** |
| Magnesium | 7439-95-4 | NE | NE | **3280** | **5950 J** | **4510** | **4470** | **2490** | **6070** |
| Manganese | 7439-96-5 | 10000 | 2000 | **199 J** | **27.8 J** | **149 J** | **342 J** | **254** | **238** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.15** | 0.14 UJ | 0.036 U | 0.032 U | **0.306** | **2.41** |
| Nickel | 7440-02-0 | 10000 | 130 | **27.6** | **8.2 J** | **7.2 J** | **7.4 J** | **13.7** | **357** |
| Potassium | 7440-09-7 | NE | NE | **723 J** | **1010 J** | **504 J** | **375 J** | **1170** | **3940** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.1 U | **2.3 J** | 2.3 U | 2 U | 2.45 U | **28.4** |
| Silver | 7440-22-4 | 6800 | 8.3 | 2.1 U | 8.4 UJ | 2.3 U | 2 U | 0.611 U | **4.96** |
| Sodium | 7440-23-5 | NE | NE | **598 J** | **11600 J** | 1160 U | 1020 U | **203** | **1620** |
| Thallium | 7440-28-0 | NE | NE | 2.1 U | 8.4 UJ | 2.3 U | 2 U | 0.611 U | **0.741 J** |
| Vanadium | 7440-62-2 | NE | NE | **25.6** | **33.4 J** | **13.6** | **23.6** | **14.8** | **40** |
| Zinc | 7440-66-6 | 10000 | 2480 | **385** | 25.1 UJ | **13.7** | **23.5** | **58.1** | **911** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.4 U | 9.3 UJ | 2.6 U | 2.4 U | 1.13 U | 1.56 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | **8** | **76.3** | **16.3** | **8.9** | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **92** | **23.7** | **83.7** | **91.1** | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **3220** | **472000** | **2280** | **2030** | **6600** | **56200** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB203 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB205/MW205 | GPEC-SB205/MW205 |
| | | | Sample Name | GPEC-SB203 (86-87) | GPEC-SB204 (1-2) | GPEC-SB204 (19-20) | GPEC-SB204 (86-87) | GPEC-XX071112-2 | GPEC-SB205 (6-7) | GPEC-SB205 (34-35) |
| | | | Start Depth | 86 | 1 | 19 | 86 | 86 | 6 | 34 |
| | | | End Depth | 87 | 2 | 20 | 87 | 87 | 7 | 35 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/11/2012 | 6/27/2012 | 7/11/2012 | 7/11/2012 | 7/11/2012 | 6/28/2012 | 7/2/2012 |
| | | | Parent Sample Code | | | | | GPECSB204 (86-87) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00583 U | 10.8 U | **0.036 J** | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00583 U | 10.8 U | **0.00611 J** | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | **27.8** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 21.5 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | **6.03** |
| Total BTEX | TBTEX | NE | NE | ND | ND | **0.04211** | ND | ND | ND | **33.83** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 U | 10.8 U | 0.092 UJ | 0.029 U | 0.028 U | 0.028 U | 0.725 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Bromoform | 75-25-2 | NE | NE | 0.012 U | 10.8 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 0.725 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 10.8 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 0.725 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00583 U | 10.8 U | **0.028 J** | 0.00588 U | 0.00567 U | 0.00564 U | **2.55** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.012 U | 10.8 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 0.725 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.012 U | 10.8 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 0.725 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.012 U | 10.8 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 0.725 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 21.5 U | 0.037 UJ | 0.012 U | 0.011 U | 0.011 U | 1.45 U |
| Styrene | 100-42-5 | NE | NE | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | **0.00507 J** | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00583 U | 10.8 U | 0.019 UJ | 0.00588 U | 0.00567 U | 0.00564 U | 0.725 U |
| Total VOCs | TVOC | NE | NE | **0.00507** | ND | **0.07011** | ND | ND | ND | **36.38** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.059** | **15.1** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.095** | **5.35** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.212** | **7.69** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.292** | **0.459** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.039 U | **38.4** | 0.123 UJ | 0.039 U | 0.038 U | **1.74** | **9.56** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.056** | **6.98** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | **10.1** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB203 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB205/MW205 | GPEC-SB205/MW205 |
| | | | Sample Name | GPEC-SB203 (86-87) | GPEC-SB204 (1-2) | GPEC-SB204 (19-20) | GPEC-SB204 (86-87) | GPEC-XX071112-2 | GPEC-SB205 (6-7) | GPEC-SB205 (34-35) |
| | | | Start Depth | 86 | 1 | 19 | 86 | 86 | 6 | 34 |
| | | | End Depth | 87 | 2 | 20 | 87 | 87 | 7 | 35 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/11/2012 | 6/27/2012 | 7/11/2012 | 7/11/2012 | 7/11/2012 | 6/28/2012 | 7/2/2012 |
| | | | Parent Sample Code | | | | | GPECSB204 (86-87) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.039 U | **2280** | **0.111 J** | **0.047** | **0.059** | **0.094** | **22.6** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.039 U | **24.5 J** | 0.123 UJ | 0.039 U | 0.038 U | **0.814** | **23.9** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.039 U | **35.1** | 0.123 UJ | 0.039 U | 0.038 U | **1.33** | **10.7** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.851** | **4.38** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.039 U | **24.8 J** | 0.123 UJ | 0.039 U | 0.038 U | **1.01** | **3.81** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.039 U | **17.1 J** | 0.123 UJ | 0.039 U | 0.038 U | **0.964** | **1.97** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.039 U | **29.4** | 0.123 UJ | 0.039 U | 0.038 U | **0.936** | **2.11** |
| Chrysene | 218-01-9 | 110 | 1 | 0.039 U | **24.6 J** | 0.123 UJ | 0.039 U | 0.038 U | **0.977** | **4.85** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.135** | **0.245** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.365** | **0.55** |
| Total PAHs | TPAH | NE | NE | ND | **2473.9** | **0.111** | **0.047** | **0.059** | **9.93** | **130.354** |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Carbazole | 86-74-8 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.073** | 0.241 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | **0.042** | **1.18** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | R | R |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | R | 0.123 UJ | 0.039 U | 0.038 U | R | R |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 28.4 U | **7.84 J** | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 28.4 U | 0.123 UJ | 0.039 U | 0.038 U | 0.037 U | 0.241 U |
| Total SVOCs | TSVOC | NE | NE | ND | **2473.9** | **7.951** | **0.047** | **0.059** | **10.045** | **131.534** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB203 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB204 | GPEC-SB205/MW205 | GPEC-SB205/MW205 |
| | | | Sample Name | GPEC-SB203 (86-87) | GPEC-SB204 (1-2) | GPEC-SB204 (19-20) | GPEC-SB204 (86-87) | GPEC-XX071112-2 | GPEC-SB205 (6-7) | GPEC-SB205 (34-35) |
| | | | Start Depth | 86 | 1 | 19 | 86 | 86 | 6 | 34 |
| | | | End Depth | 87 | 2 | 20 | 87 | 87 | 7 | 35 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/11/2012 | 6/27/2012 | 7/11/2012 | 7/11/2012 | 7/11/2012 | 6/28/2012 | 7/2/2012 |
| | | | Parent Sample Code | | | | | GPECSB204 (86-87) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.022 U | 0.02 U | 0.073 UJ | 0.023 U | 0.022 U | 0.023 U | 0.028 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.503 U | NA | NA | NA | 0.056 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.04 U | NA | NA | NA | 0.0045 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.503 U | NA | NA | NA | 0.056 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | 0.049 U | NA | NA | NA | 0.052 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3840 J** | **3510** | **9490 J** | **8630 J** | **2980 J** | **6520** | **11800** |
| Antimony | 7440-36-0 | NE | NE | 1.29 U | **0.787 J** | 3.94 UJ | 1.27 U | 1.18 U | 1.22 U | **1.47** |
| Arsenic | 7440-38-2 | 16 | 16 | **2.71** | **15.3** | **6.45 J** | **3.79 J** | **1.22 J** | **10.7** | **93.9** |
| Barium | 7440-39-3 | 10000 | 820 | **20.9** | **92.6** | **25.9 J** | **26.6** | **24.7** | **231** | **206** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.644 U | **0.476 J** | 1.97 UJ | **0.603 J** | 0.591 U | **0.388 J** | **0.608 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.644 U | **0.94** | 1.97 UJ | 0.633 U | 0.591 U | **1.04** | **2.18** |
| Calcium | 7440-70-2 | NE | NE | **8460 J** | **4050** | **5660 J** | **4000** | **6180** | **4010** | **5070** |
| Chromium | 7440-47-3 | NE | NE | **7.42** | **9.97** | **20.2 J** | **16.5 J** | **5.53 J** | **18.3** | **108** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | R | 1.08 U | R | R | R | 1.13 UJ | 1.45 UJ |
| Cobalt | 7440-48-4 | NE | NE | **4.71** | **5.19** | **6.65 J** | **8.93 J** | **2.76 J** | **6.59** | **21.7** |
| Copper | 7440-50-8 | 10000 | 1720 | **16.6** | **188** | **7.25 J** | **14.9 J** | **5.93 J** | **107** | **988** |
| Iron | 7439-89-6 | NE | NE | **11400** | **9660** | **14300 J** | **19400 J** | **9990 J** | **42600** | **25300** |
| Lead | 7439-92-1 | 3900 | 450 | **9.71 J** | **159** | **7.34 J** | **8.33 J** | **3.66 J** | **591** | **378** |
| Magnesium | 7439-95-4 | NE | NE | **4140** | **2250** | **5340 J** | **3120** | **3010** | **2200** | **5250** |
| Manganese | 7439-96-5 | 10000 | 2000 | **295** | **83.1** | **68.5 J** | **334** | **321** | **344** | **224** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.013 U | **1.5 J** | **0.026 J** | 0.015 U | **0.011 J** | **0.968 J** | **2.12 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **7.31** | **16.8** | **18.1 J** | **15.5 J** | **5.25 J** | **24.2** | **232** |
| Potassium | 7440-09-7 | NE | NE | **630** | **458** | **2610 J** | **1270 J** | **487 J** | **909** | **3120** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.58 U | **2.4 J** | 7.88 UJ | 2.53 U | 2.36 U | 2.44 U | **24.4** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.644 U | **0.19 J** | 1.97 UJ | 0.633 U | 0.591 U | **0.154 J** | **3.75** |
| Sodium | 7440-23-5 | NE | NE | **334 J** | **273** | **12400 J** | **688 J** | **210 J** | **336** | **2600** |
| Thallium | 7440-28-0 | NE | NE | 0.644 U | **0.411 J** | 1.97 UJ | 0.633 U | 0.591 U | **0.284 J** | **0.916** |
| Vanadium | 7440-62-2 | NE | NE | **15.7** | **34.3** | **41.5 J** | **23.3 J** | **11.5 J** | **25.5** | **35.3** |
| Zinc | 7440-66-6 | 10000 | 2480 | **20.3** | **235** | **35 J** | **41 J** | **11.8 J** | **501** | **701** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.17 U | 1.08 U | 3.69 UJ | 1.18 U | 1.13 U | **0.976 J** | 1.45 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **2490** | **192000** | **144000** | **11800 J** | **6000 J** | **19200** | **40100** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
| Investigation Phase | | | | Phase 1 | Phase 1 | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-SB205/MW205 | GPEC-SB205/MW205 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 |
| Sample Name | | | | GPEC-SB205 (71-72) | GPEC-SB205 (95-96) | GPEC-SB-2 (10-12) | GPEC-SB-2 (30-32) | GPEC-SB-XX-040109 | GPEC-SB-2 (98-100) |
| Start Depth | | | | 71 | 95 | 10 | 30 | 30 | 98 |
| End Depth | | | | 72 | 96 | 12 | 32 | 32 | 100 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 7/2/2012 | 7/2/2012 | 4/1/2009 | 4/1/2009 | 4/1/2009 | 4/7/2009 |
| Parent Sample Code | | | | | | | | GPECSB-2 (30-32) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 10.8 U | 0.00548 U | 0.0058 U | **0.0043 J** | 3.7 U | 0.006 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **9.51 J** | 0.00548 U | **0.00017 J** | **0.0037 J** | 3.7 U | **0.0017 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **117** | 0.00548 U | 0.0058 U | **0.24 J** | **39 J** | 0.006 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **106** | 0.011 U | **0.0027 J** | **0.14 J** | **27 J** | 0.006 U |
| Total BTEX | TBTEX | NE | NE | **232.51** | ND | **0.00287** | **0.388** | **66** | **0.0017** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 10.8 U | 0.027 U | **0.0081 J** | **0.039 J** | 9.3 U | **0.011 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Bromoform | 75-25-2 | NE | NE | 10.8 U | 0.011 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Bromomethane | 74-83-9 | NE | NE | 10.8 U | 0.011 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 10.8 U | 0.00548 U | 0.012 U | 0.073 U | 3.7 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 10.8 U | 0.00548 U | 0.0058 U | **0.014 J** | 3.7 U | 0.006 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Chloromethane | 74-87-3 | NE | NE | 10.8 U | 0.00548 U | 0.0058 U | 0.037 UJ | 3.7 U | 0.006 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 10.8 U | 0.011 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 10.8 U | 0.011 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 10.8 U | 0.011 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 10.8 U | 0.00548 U | 0.012 U | 0.073 U | 3.7 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 21.6 U | 0.011 U | 0.023 U | 0.15 U | 3.7 U | 0.024 U |
| Styrene | 100-42-5 | NE | NE | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 10.8 U | 0.00548 U | 0.0058 U | 0.037 U | 3.7 U | 0.006 U |
| Total VOCs | TVOC | NE | NE | **232.51** | ND | **0.01097** | **0.441** | **66** | **0.0127** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **281** | 0.036 U | **0.058 J** | **22** | **18** | 0.31 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **30.7** | 0.036 U | **0.11 J** | **2.4 J** | **2.2 J** | 0.31 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **222** | 0.036 U | **0.24 J** | **8.7** | **7.2** | 0.31 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 16.1 U | 0.036 U | **0.37** | **1.7 J** | **1.6 J** | **0.24 J** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **137** | 0.036 U | **2.2** | **11** | **7.8** | 0.31 U |
| Fluorene | 86-73-7 | 1000 | 386 | **172** | 0.036 U | **0.12 J** | **11** | **8.9** | 0.31 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **497** | 0.036 U | **0.033 J** | **39** | **35** | **0.015 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | | Investigation Phase | Phase 1 | Phase 1 | PDI | PDI | PDI | PDI |
| | | | | Location Name | GPEC-SB205/MW205 | GPEC-SB205/MW205 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 |
| | | | | Sample Name | GPEC-SB205 (71-72) | GPEC-SB205 (95-96) | GPEC-SB-2 (10-12) | GPEC-SB-2 (30-32) | GPEC-SB-XX-040109 | GPEC-SB-2 (98-100) |
| | | | | Start Depth | 71 | 95 | 10 | 30 | 30 | 98 |
| | | | | End Depth | 72 | 96 | 12 | 32 | 32 | 100 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 7/2/2012 | 7/2/2012 | 4/1/2009 | 4/1/2009 | 4/1/2009 | 4/7/2009 |
| | | | | Parent Sample Code | | | | | GPECSB-2 (30-32) | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **1120** | **0.047** | **0.2 J** | **33** | **30** | **0.018 J** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **230** | **0.049** | **0.47** | **32** | **27** | **0.027 J** |
| Pyrene | 129-00-0 | 1000 | 1000 | **204** | 0.036 U | **1.8** | **14** | **12** | 0.31 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **68.8** | 0.036 U | **0.56** | **5.3** | **4.2** | 0.31 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **71** | 0.036 U | **0.57** | **4.8** | **3.8 J** | 0.31 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **28.2** | 0.036 U | **0.65** | **4.1** | **2.5 J** | 0.31 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **30.5** | 0.036 U | **0.27 J** | **1.5 J** | **1.1 J** | 0.31 U |
| Chrysene | 218-01-9 | 110 | 1 | **74** | 0.036 U | **0.57** | **5** | **4 J** | 0.31 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 16.1 U | 0.036 U | **0.27 J** | 3.9 U | 4 U | 0.31 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 16.1 U | 0.036 U | **0.36** | **1.9 J** | **1.9 J** | 0.31 UJ |
| Total PAHs | TPAH | NE | NE | **3166.2** | **0.096** | **8.851** | **197.4** | **167.2** | **0.3** |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 16.1 U | 0.036 U | **0.043 J** | 3.9 U | 4 U | **0.33** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | **0.037 J** |
| Carbazole | 86-74-8 | NE | NE | 16.1 U | 0.036 U | **0.07 J** | **1 J** | **0.54 J** | 0.31 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 16.1 U | 0.036 U | 0.31 U | 3.9 UJ | 4 U | 0.31 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **19.8** | 0.036 U | **0.085 J** | **1.7 J** | **1.4 J** | 0.31 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 16.1 U | 0.036 U | 0.77 U | 9.8 UJ | 9.9 U | 0.77 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 16.1 U | 0.036 U | 2 U | 25 U | 25 U | 1.9 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | R | R | 2 U | 25 U | 25 U | 1.9 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | R | 0.77 U | 9.8 U | 9.9 U | 0.77 U |
| Hexachloroethane | 67-72-1 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Isophorone | 78-59-1 | NE | 4.4 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 16.1 U | 0.036 U | 2 U | 25 U | 25 U | 1.9 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 16.1 U | 0.036 U | 2 U | 25 UJ | 25 U | 1.9 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 16.1 U | 0.036 U | 2 U | 25 U | 25 U | 1.9 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 16.1 U | 0.036 U | 2 U | 25 U | 25 U | 1.9 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 16.1 U | 0.036 U | 2 U | 25 U | 25 U | 1.9 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 16.1 U | 0.036 U | 0.31 U | 3.9 U | 4 U | 0.31 U |
| Total SVOCs | TSVOC | NE | NE | **3186** | **0.096** | **9.049** | **200.1** | **169.14** | **0.667** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
| Investigation Phase | | | | Phase 1 | Phase 1 | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-SB205/MW205 | GPEC-SB205/MW205 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 | GPEC-SB02/MW-2 |
| Sample Name | | | | GPEC-SB205 (71-72) | GPEC-SB205 (95-96) | GPEC-SB-2 (10-12) | GPEC-SB-2 (30-32) | GPEC-SB-XX-040109 | GPEC-SB-2 (98-100) |
| Start Depth | | | | 71 | 95 | 10 | 30 | 30 | 98 |
| End Depth | | | | 72 | 96 | 12 | 32 | 32 | 100 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 7/2/2012 | 7/2/2012 | 4/1/2009 | 4/1/2009 | 4/1/2009 | 4/7/2009 |
| Parent Sample Code | | | | | | | | GPECSB-2 (30-32) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 UJ | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 UJ | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 UJ | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 UJ | 0.021 U | 0.019 U | 0.025 U | 0.025 UJ | 0.02 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.021 UJ | 0.021 U | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.021 UJ | 0.021 U | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2530** | **4190** | **5080** | **10500** | **13400** | **4560** |
| Antimony | 7440-36-0 | NE | NE | 1.21 U | 1.1 U | 4.7 UJ | 6 UJ | 5.9 UJ | 4.8 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | **1.52** | **2.06** | 5.9 U | **13.3 J** | **50.6 J** | 6.1 UJ |
| Barium | 7440-39-3 | 10000 | 820 | **12.3** | **21.4** | **60.3** | **53.4 J** | **180 J** | **26.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.603 U | **0.307 J** | **0.42 J** | **0.66 J** | **0.9 J** | **0.47 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.603 U | 0.55 U | 1.4 U | 1.8 U | 1.8 U | 1.5 U |
| Calcium | 7440-70-2 | NE | NE | **7950** | **5880** | **8310 J** | **10200 J** | **7840 J** | **5340** |
| Chromium | 7440-47-3 | NE | NE | **4.59** | **8.4** | **10.7 J** | **23.3 J** | **51.1 J** | **13.8** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.08 UJ | 1.1 UJ | 0.97 UJ | 1.2 U | 1.2 U | 0.89 U |
| Cobalt | 7440-48-4 | NE | NE | **2.66** | **4.22** | **4.5** | **7.1** | **11.6** | **7.9** |
| Copper | 7440-50-8 | 10000 | 1720 | **8.76** | **8.07** | **14.1** | **203 J** | **455 J** | **11.4 J** |
| Iron | 7439-89-6 | NE | NE | **5540** | **14400** | **8510** | **22500** | **26200** | **20400 J** |
| Lead | 7439-92-1 | 3900 | 450 | **1.25** | **4.06** | **35** | **67.9 J** | **295 J** | **6.8** |
| Magnesium | 7439-95-4 | NE | NE | **3910** | **3170** | **4460 J** | **5850 J** | **7040 J** | **4800** |
| Manganese | 7439-96-5 | 10000 | 2000 | **120** | **282** | **276** | **457** | **459** | **339 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.012 U | 0.014 U | **0.046** | **0.13 J** | **2 J** | **0.0092 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **5.56** | **7.51** | **15.3** | **22.1 J** | **64.6 J** | **13 J** |
| Potassium | 7440-09-7 | NE | NE | **692** | **670** | **1290** | **2010 J** | **4470 J** | **1020 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.41 U | 2.2 U | 10.6 UJ | 13.7 UJ | 13.4 UJ | 11 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.603 U | 0.55 U | 1.4 U | 1.8 U | **0.8 J** | 1.5 U |
| Sodium | 7440-23-5 | NE | NE | **191** | **245** | **1110 J** | **428 J** | **479 J** | **576** |
| Thallium | 7440-28-0 | NE | NE | 0.603 U | 0.55 U | **0.84 J** | **3 J** | **1.1 J** | **1.5 J** |
| Vanadium | 7440-62-2 | NE | NE | **8.32** | **14.1** | **11.3 J** | **24.1 J** | **34.2 J** | **17.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **10.3** | **25.9** | **32.4 J** | **178 J** | **363 J** | **37 J** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.08 U | 1.1 U | 0.23 UJ | 0.29 UJ | 0.3 UJ | 0.24 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | **82.6** | **65.2** | **64.9** | **90.3** |
| Total Organic Carbon | TOC | NE | NE | **25900** | **7290** | **5750** | **31500** | **37700** | **25600** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-SB03S/MW-3S | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D |
| Sample Name | | | | GPEC-SB-3S (10-12) | GPEC-SB-3 (3-4) | GPEC-SB-3 (7-8) | GPEC-SB-3 (8-10) | GPEC-SB-3 (34-36) | GPEC-SB-3 (52-54) | GPEC-SB-3 (102-104) |
| Start Depth | | | | 10 | 3 | 7 | 8 | 34 | 52 | 102 |
| End Depth | | | | 12 | 4 | 8 | 10 | 36 | 54 | 104 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 4/22/2009 | 3/30/2009 | 3/30/2009 | 4/17/2009 | 4/17/2009 | 4/15/2009 | 4/17/2009 |
| Parent Sample Code | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | NA | 0.0061 UJ | 0.0062 U | NA | **0.64 J** | 0.0064 U | 27 U |
| Toluene | 108-88-3 | 1000 | 0.7 | NA | 0.0061 UJ | 0.0062 U | NA | **0.84** | 0.0064 U | **14 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | NA | 0.0061 UJ | 0.0062 U | NA | **11** | 0.0064 U | **110** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | NA | 0.0061 UJ | 0.0062 U | NA | **16** | 0.0064 U | **120** |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | **28.48** | ND | **244** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | NA | 0.025 UJ | **0.0042 J** | NA | 1.7 UJ | 0.026 U | 66 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Bromoform | 75-25-2 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 UJ | 0.0064 U | 27 UJ |
| Bromomethane | 74-83-9 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 UJ | 27 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | NA | 0.012 UJ | 0.012 U | NA | 0.7 U | 0.013 U | 27 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | NA | 0.0061 UJ | 0.0062 UJ | NA | **0.29 J** | 0.0064 UJ | 27 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Chloroethane | 75-00-3 | NE | 1.9 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Chloroform | 67-66-3 | 700 | 0.37 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Chloromethane | 74-87-3 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Dibromochloromethane | 124-48-1 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | NA | 0.012 UJ | 0.012 U | NA | 0.7 UJ | 0.013 U | 27 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 UJ | 0.0064 U | 27 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | NA | 0.025 UJ | 0.025 U | NA | **0.24 J** | 0.026 U | 27 U |
| Styrene | 100-42-5 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | NA | R | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | NA | 0.0061 UJ | 0.0062 U | NA | 0.7 U | 0.0064 U | 27 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **0.0042** | ND | **29.01** | ND | **244** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | NA | **0.11 J** | **0.029 J** | NA | **52** | 0.34 U | **170 J** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | NA | **1.3** | 0.33 U | NA | **23** | 0.34 U | **650** |
| Anthracene | 120-12-7 | 1000 | 1000 | NA | **1.5** | **0.04 J** | NA | **26** | 0.34 U | **330** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | NA | **0.9** | **0.36** | NA | **1.2 J** | 0.34 U | **41 J** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | NA | **5.9** | **0.25 J** | NA | **22** | 0.34 U | **330** |
| Fluorene | 86-73-7 | 1000 | 386 | NA | **0.46** | 0.33 U | NA | **24** | 0.34 U | **380** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | NA | **0.89** | **0.01 J** | NA | **110** | 0.34 U | **130 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB03S/MW-3S | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D |
| | | | Sample Name | GPEC-SB-3S (10-12) | GPEC-SB-3 (3-4) | GPEC-SB-3 (7-8) | GPEC-SB-3 (8-10) | GPEC-SB-3 (34-36) | GPEC-SB-3 (52-54) | GPEC-SB-3 (102-104) |
| | | | Start Depth | 10 | 3 | 7 | 8 | 34 | 52 | 102 |
| | | | End Depth | 12 | 4 | 8 | 10 | 36 | 54 | 104 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/22/2009 | 3/30/2009 | 3/30/2009 | 4/17/2009 | 4/17/2009 | 4/15/2009 | 4/17/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | NA | **2** | **0.024 J** | NA | **150** | 0.34 U | **3200 J** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | NA | **4.9** | **0.14 J** | NA | **71** | 0.34 U | **1100 J** |
| Pyrene | 129-00-0 | 1000 | 1000 | NA | **3.2** | **0.27 J** | NA | **29** | **0.02 J** | **490 J** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | NA | **2.9** | **0.13 J** | NA | **14 J** | 0.34 U | **160 J** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | NA | **2.9** | **0.14 J** | NA | **11 J** | 0.34 U | **180** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | NA | **4.1** | **0.15 J** | NA | **7.3 J** | 0.34 U | **94 J** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | NA | **1.6** | **0.049 J** | NA | **2 J** | 0.34 U | **35 J** |
| Chrysene | 218-01-9 | 110 | 1 | NA | **3.2** | **0.11 J** | NA | **16 J** | 0.34 U | **140 J** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | NA | **0.46** | **0.28 J** | NA | 19 U | 0.34 U | 180 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | NA | **0.98** | **0.31 J** | NA | **2.7 J** | 0.34 U | **49 J** |
| Total PAHs | TPAH | NE | NE | ND | **37.3** | **2.292** | ND | **561.2** | **0.02** | **7479** |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | NA | **0.12 J** | 0.33 U | NA | 19 U | **0.056 J** | 180 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Carbazole | 86-74-8 | NE | NE | NA | **0.63** | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 UJ | 180 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | NA | **0.55** | **0.024 J** | NA | **3.4 J** | 0.34 U | **59 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | NA | **0.02 J** | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | NA | **0.12 J** | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | NA | 0.82 U | 0.83 U | NA | 47 U | 0.83 UJ | 440 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | NA | 0.82 U | 0.83 U | NA | 47 U | 0.83 U | 440 U |
| Hexachloroethane | 67-72-1 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Isophorone | 78-59-1 | NE | 4.4 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 UJ | 1100 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| Phenol | 108-95-2 | 1000 | 0.33 | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | NA | 2.1 U | 2.1 U | NA | 120 U | 2.1 U | 1100 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | NA | 0.33 U | 0.33 U | NA | 19 U | 0.34 U | 180 U |
| Total SVOCs | TSVOC | NE | NE | ND | **38.74** | **2.316** | ND | **564.6** | **0.076** | **7538** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB03S/MW-3S | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D |
| | | | Sample Name | GPEC-SB-3S (10-12) | GPEC-SB-3 (3-4) | GPEC-SB-3 (7-8) | GPEC-SB-3 (8-10) | GPEC-SB-3 (34-36) | GPEC-SB-3 (52-54) | GPEC-SB-3 (102-104) |
| | | | Start Depth | 10 | 3 | 7 | 8 | 34 | 52 | 102 |
| | | | End Depth | 12 | 4 | 8 | 10 | 36 | 54 | 104 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/22/2009 | 3/30/2009 | 3/30/2009 | 4/17/2009 | 4/17/2009 | 4/15/2009 | 4/17/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | NA | 0.021 U | 0.021 U | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | NA | **0.014 J** | **0.0082 J** | NA | 0.024 U | 0.021 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.014** | **0.0082** | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | NA | **1450** | **6250** | NA | **8690** | **2950** | **2140** |
| Antimony | 7440-36-0 | NE | NE | NA | 5 UJ | 5 UJ | NA | **3.5 J** | 5 UJ | 5.4 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | NA | **7.8** | 6.4 U | NA | **124 J** | 6.4 UJ | 6.9 UJ |
| Barium | 7440-39-3 | 10000 | 820 | NA | **43.6** | **54.8** | NA | **179** | **24** | **9.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | NA | **0.44 J** | **0.56 J** | NA | **0.4 J** | **0.13 J** | **0.12 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | NA | 1.5 U | 1.5 U | NA | **1.4 J** | 1.5 U | 1.6 U |
| Calcium | 7440-70-2 | NE | NE | NA | **8240 J** | **6590 J** | NA | **9470** | **11800** | **10800** |
| Chromium | 7440-47-3 | NE | NE | NA | **4.5 J** | **12.9 J** | NA | **46.3** | **6.3** | **4.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | NA | 1 U | 0.93 UJ | NA | 1.1 U | 1 U | 0.9 U |
| Cobalt | 7440-48-4 | NE | NE | NA | **1.9** | **7.4** | NA | **11.4** | **3.3** | **2.4** |
| Copper | 7440-50-8 | 10000 | 1720 | NA | **340** | **38.8** | NA | **782 J** | **8.1 J** | **7.5 J** |
| Iron | 7439-89-6 | NE | NE | NA | **5040** | **10300** | NA | **18800 J** | **6840 J** | **8780 J** |
| Lead | 7439-92-1 | 3900 | 450 | NA | **175** | **52.6** | NA | **257** | 4.6 U | **1.2 J** |
| Magnesium | 7439-95-4 | NE | NE | NA | **4680 J** | **3730 J** | NA | **6520** | **7600** | **5660** |
| Manganese | 7439-96-5 | 10000 | 2000 | NA | **26.2** | **199** | NA | **242 J** | **114 J** | **189 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | NA | **0.29** | **0.14** | NA | **2.4** | 0.064 U | 0.06 U |
| Nickel | 7440-02-0 | 10000 | 130 | NA | **9** | **21.5** | NA | **115 J** | **6.7 J** | **6 J** |
| Potassium | 7440-09-7 | NE | NE | NA | **214** | **989** | NA | **1380 J** | **585 J** | **350 J** |
| Selenium | 7782-49-2 | 6800 | 4 | NA | 11.4 UJ | 11.4 UJ | NA | **6.4 J** | 11.5 UJ | 12.3 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | NA | **0.73 J** | 1.5 U | NA | **2.2** | 1.5 U | 1.6 U |
| Sodium | 7440-23-5 | NE | NE | NA | **95.6 J** | **103 J** | NA | **856** | **163** | **521 J** |
| Thallium | 7440-28-0 | NE | NE | NA | **1.5 J** | **1.6 J** | NA | **3.7 J** | **1.8 J** | **1.3 J** |
| Vanadium | 7440-62-2 | NE | NE | NA | **39 J** | **13.2 J** | NA | **22.9** | **6.7** | **7.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | NA | **88.6 J** | **51.8 J** | NA | **461 J** | **15.9 J** | **9.9 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.24 U | 0.24 UJ | 0.25 UJ | 0.25 U | 0.28 U | 0.25 U | 0.26 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | **79.3** | **85.7** | NA | **70.4** | **78.3** | **89** |
| Total Organic Carbon | TOC | NE | NE | NA | **621000** | **8080** | NA | **59100** | **6070** | **23400** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-SB03/MW-3D** | **GPEC-SB03/MW-3D** | **GPEC-SB04** | **GPEC-SB04** | **GPEC-SB04B** | **GPEC-SB04C/MW-4** |
| **Sample Name** | | | | **GPEC-SB-XX-041709** | **GPEC-SB-3 (110-112)** | **GPEC-SB-4 (5.5-6)** | **GPEC-SB-4 (8-10)** | **GPEC-SB-4B (34-36)** | **GPEC-SB-4C (59-61)** |
| **Start Depth** | | | | **102** | **110** | **5.5** | **8** | **34** | **59** |
| **End Depth** | | | | **104** | **112** | **6** | **10** | **36** | **61** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/17/2009** | **4/17/2009** | **4/13/2009** | **4/27/2009** | **4/28/2009** | **4/30/2009** |
| **Parent Sample Code** | | | | **GPEC-SB-3 (102-104)** | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 25 U | 0.006 U | 0.0063 U | 0.006 U | **0.013** | 0.0057 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **13 J** | **0.00092 J** | **0.00048 J** | **0.0004 J** | **0.006 J** | 0.0057 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **110** | **0.0028 J** | **0.0013 J** | **0.0023 J** | **0.19** | 0.0057 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **110** | **0.0027 J** | **0.00086 J** | **0.0016 J** | **0.19** | 0.0057 U |
| Total BTEX | TBTEX | NE | NE | **233** | **0.00642** | **0.00264** | **0.0043** | **0.399** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 63 UJ | 0.024 UJ | **0.014 J** | **0.012 J** | 0.037 UJ | 0.023 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Bromoform | 75-25-2 | NE | NE | 25 UJ | 0.006 U | 0.0063 U | 0.006 U | 0.0068 UJ | 0.0057 UJ |
| Bromomethane | 74-83-9 | NE | NE | 25 U | 0.006 UJ | 0.0063 UJ | 0.006 UJ | 0.0068 UJ | 0.0057 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 25 U | 0.012 U | 0.013 UJ | 0.012 U | **0.0075 J** | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 25 U | 0.006 UJ | 0.0063 UJ | 0.006 UJ | **0.0017 J** | 0.0057 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 25 U | 0.006 UJ | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 25 U | 0.006 UJ | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 25 U | 0.006 UJ | 0.0063 U | 0.006 UJ | 0.0068 U | 0.0057 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Chloromethane | 74-87-3 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 25 UJ | 0.012 U | 0.013 U | 0.012 U | 0.014 UJ | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 25 UJ | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 25 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.023 U |
| Styrene | 100-42-5 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 25 U | 0.006 UJ | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 25 U | 0.006 UJ | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 25 U | 0.006 U | 0.0063 U | 0.006 U | R | 0.0057 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 25 U | 0.006 U | 0.0063 U | 0.006 U | 0.0068 U | 0.0057 U |
| Total VOCs | TVOC | NE | NE | **233** | **0.00642** | **0.01664** | **0.0163** | **0.4082** | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **99 J** | **0.082 J** | **0.024 J** | **1.5** | **16** | 0.31 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **400** | **0.092 J** | **0.019 J** | **1.7** | 3.7 U | 0.31 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **190** | **0.19 J** | **0.099 J** | **2.3** | **9** | 0.31 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **20 J** | 0.32 U | **0.48** | **2.4** | **5** | 0.31 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **190** | **0.21 J** | **0.67** | **11** | **9.9** | 0.31 U |
| Fluorene | 86-73-7 | 1000 | 386 | **210** | **0.21 J** | 0.32 U | **1.8** | **8.2** | 0.31 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **79 J** | **0.096 J** | **0.015 J** | **0.41 J** | **35** | 0.31 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB04 | GPEC-SB04 | GPEC-SB04B | GPEC-SB04C/MW-4 |
| | | | Sample Name | GPEC-SB-XX-041709 | GPEC-SB-3 (110-112) | GPEC-SB-4 (5.5-6) | GPEC-SB-4 (8-10) | GPEC-SB-4B (34-36) | GPEC-SB-4C (59-61) |
| | | | Start Depth | 102 | 110 | 5.5 | 8 | 34 | 59 |
| | | | End Depth | 104 | 112 | 6 | 10 | 36 | 61 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/17/2009 | 4/17/2009 | 4/13/2009 | 4/27/2009 | 4/28/2009 | 4/30/2009 |
| | | | Parent Sample Code | GPEC-SB-3 (102-104) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **1800 J** | **1.8** | **0.026 J** | **1.2** | **36** | 0.31 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **650 J** | **0.78** | **0.44** | **9** | **28** | 0.31 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **290 J** | **0.42** | **0.83** | **9.2** | **14** | 0.31 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **110 J** | **0.12 J** | **0.54** | **4.9** | **6.5** | 0.31 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **110 J** | **0.12 J** | **0.52** | **5** | **5.7** | 0.31 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **63 J** | **0.072 J** | **0.53** | **4.7** | **3.1 J** | 0.31 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **21 J** | 0.32 U | **0.2 J** | **1.8** | **0.94 J** | 0.31 U |
| Chrysene | 218-01-9 | 110 | 1 | **90 J** | **0.1 J** | **0.57** | **4.8** | **6.7** | 0.31 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 170 U | 0.32 U | **0.33** | **0.69** | **4.1** | 0.31 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **30 J** | 0.32 U | **0.49 J** | **2.6** | **4.9** | 0.31 U |
| Total PAHs | TPAH | NE | NE | **4352** | **4.292** | **5.783** | **65** | **193.04** | ND |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 170 U | **0.13 J** | **0.15 J** | **0.16 J** | **2.1 J** | **0.19 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Carbazole | 86-74-8 | NE | NE | 170 U | 0.32 U | **0.027 J** | **0.68** | **0.31 J** | 0.31 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **35 J** | **0.039 J** | 0.32 U | **1.1** | **1.4 J** | 0.31 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 170 U | 0.32 U | **0.021 J** | 0.64 U | 3.7 U | 0.31 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 430 U | 0.8 U | 0.8 U | 1.6 U | 9.1 U | 0.77 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 430 U | 0.8 U | 0.8 U | 1.6 U | 9.1 U | 0.77 U |
| Hexachloroethane | 67-72-1 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Isophorone | 78-59-1 | NE | 4.4 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 170 U | 0.32 U | 0.32 U | **0.047 J** | 3.7 U | 0.31 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 170 U | 0.32 U | 0.32 U | 0.64 U | **0.39 J** | 0.31 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 170 U | 0.32 U | 0.32 U | **0.12 J** | 3.7 U | 0.31 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1100 U | 2 U | 2 U | 4 U | 23 U | 1.9 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 170 U | 0.32 U | 0.32 U | 0.64 U | 3.7 U | 0.31 U |
| Total SVOCs | TSVOC | NE | NE | **4387** | **4.461** | **5.981** | **67.107** | **197.24** | **0.19** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB03/MW-3D | GPEC-SB03/MW-3D | GPEC-SB04 | GPEC-SB04 | GPEC-SB04B | GPEC-SB04C/MW-4 |
| | | | Sample Name | GPEC-SB-XX-041709 | GPEC-SB-3 (110-112) | GPEC-SB-4 (5.5-6) | GPEC-SB-4 (8-10) | GPEC-SB-4B (34-36) | GPEC-SB-4C (59-61) |
| | | | Start Depth | 102 | 110 | 5.5 | 8 | 34 | 59 |
| | | | End Depth | 104 | 112 | 6 | 10 | 36 | 61 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/17/2009 | 4/17/2009 | 4/13/2009 | 4/27/2009 | 4/28/2009 | 4/30/2009 |
| | | | Parent Sample Code | GPEC-SB-3 (102-104) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.02 U | 0.021 U | 0.02 U | 0.023 U | 0.019 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.02 U | 0.021 U | 0.02 U | 0.023 U | 0.019 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.02 U | 0.021 U | 0.02 U | 0.023 U | 0.019 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.02 U | 0.021 U | 0.02 U | 0.023 U | 0.019 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.02 U | 0.021 U | 0.02 U | 0.023 U | 0.019 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.02 U | 0.021 U | **0.012 J** | 0.023 U | 0.019 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.02 UJ | 0.021 U | **0.01 J** | 0.023 U | 0.019 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | **0.022** | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **1880** | **6990** | **6110** | **6430** | **13600** | **2310** |
| Antimony | 7440-36-0 | NE | NE | 5.1 UJ | R | 5 UJ | **2.3 J** | 5.4 UJ | 4.6 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | 6.5 UJ | 6 UJ | 6.4 UJ | **9.5 J** | **51.5 J** | 5.9 UJ |
| Barium | 7440-39-3 | 10000 | 820 | **8.8** | **45.1** | **62.8** | **301** | **141** | **17.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.092 J** | **0.73 J** | **0.34 J** | **0.49 J** | **0.69 J** | **0.17 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.6 U | 1.4 UJ | 1.5 U | **0.35 J** | **0.58 J** | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **8150** | **3470** | **1860** | **8880** | **5090** | **12700** |
| Chromium | 7440-47-3 | NE | NE | **4.4** | **16.3** | **14.3** | **19.3** | **36.8** | **8.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **1.1** | 0.94 U | 0.96 U | 0.98 U | **1.2** | **0.47 J** |
| Cobalt | 7440-48-4 | NE | NE | **1.9** | **9 J** | **4.9** | **8.6** | **10.4** | **2.6** |
| Copper | 7440-50-8 | 10000 | 1720 | **6.1 J** | **27.2 J** | **43.7 J** | **130 J** | **379 J** | **7.6 J** |
| Iron | 7439-89-6 | NE | NE | **5390 J** | **110000 J** | **12300 J** | **28800 J** | **21300 J** | **7900 J** |
| Lead | 7439-92-1 | 3900 | 450 | 4.7 U | **11.5 J** | **226** | **437** | **136** | 4.2 U |
| Magnesium | 7439-95-4 | NE | NE | **4710** | **3980** | **2300** | **2980** | **5510** | **7080** |
| Manganese | 7439-96-5 | 10000 | 2000 | **123 J** | **3910 J** | **201 J** | **750 J** | **403 J** | **126 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.059 U | **0.011 J** | **7.4** | 0.055 U | **0.76** | 0.055 U |
| Nickel | 7440-02-0 | 10000 | 130 | **6.4 J** | **14.4 J** | **13.2 J** | **24 J** | **70.8 J** | **6.3 J** |
| Potassium | 7440-09-7 | NE | NE | **283 J** | **857 J** | **798 J** | **941 J** | **2800 J** | **410 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 11.7 UJ | R | 11.4 UJ | 11.2 UJ | 12.2 UJ | 10.5 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.6 U | **0.54 J** | **0.15 J** | **0.3 J** | **1.2 J** | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **301 J** | **486** | **419** | **493** | **1080** | **126** |
| Thallium | 7440-28-0 | NE | NE | 4.7 U | **3.5 J** | **1.2 J** | **1.6 J** | **1.3 J** | 4.2 U |
| Vanadium | 7440-62-2 | NE | NE | **5.6** | **19.6** | **13** | **18.3** | **30.2** | **8.3** |
| Zinc | 7440-66-6 | 10000 | 2480 | **8.9 J** | **54.1 J** | **69.1 J** | **379 J** | **236 J** | 13.2 UJ |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.25 U | 0.24 U | 0.25 U | 0.24 UJ | 0.27 UJ | 0.23 UJ |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **84** | **85.1** | **83.3** | **81.2** | **72** | **85.2** |
| Total Organic Carbon | TOC | NE | NE | **36900** | **31000** | **1840** | **32100** | **23000** | **6080** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-SB04C/MW-4** | **GPEC-SB05** | **GPEC-SB05S/MW-5S** | **GPEC-SB05C/MW-5D** | **GPEC-SB05C/MW-5D** | **GPEC-SB05C/MW-5D** | **GPEC-SB05C/MW-5D** |
| **Sample Name** | | | | **GPEC-SB-4C (113-115)** | **GPEC-SB-5 (3-4)** | **GPEC-SB-5S (32-34)** | **GPEC-SB-5C (8-10)** | **GPEC-SB-5C (50-52)** | **GPEC-SB-5C (76-78)** | **GPEC-SB-5C (100-102)** |
| **Start Depth** | | | | **113** | **3** | **32** | **8** | **50** | **76** | **100** |
| **End Depth** | | | | **115** | **4** | **34** | **10** | **52** | **78** | **102** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/1/2009** | **4/13/2009** | **5/8/2009** | **5/5/2009** | **5/6/2009** | **5/7/2009** | **5/7/2009** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0056 U | 0.0064 U | 0.0066 U | **0.027** | 0.0058 U | 0.006 U | 0.0059 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.00046 J** | 0.0064 U | 0.0066 U | **0.072** | 0.0058 U | 0.006 U | 0.0059 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0056 U | 0.0064 U | **0.0014 J** | **0.0087** | 0.0058 U | 0.006 U | 0.0059 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0056 U | 0.0064 U | **0.0073** | **0.14** | 0.0058 U | 0.006 U | 0.0059 U |
| Total BTEX | TBTEX | NE | NE | **0.00046** | ND | **0.0087** | **0.2477** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.022 U | **0.0045 J** | **0.028 J** | **0.018 J** | 0.023 U | 0.024 U | 0.024 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Bromoform | 75-25-2 | NE | NE | 0.0056 UJ | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0056 U | 0.0064 UJ | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.013 U | 0.013 U | 0.011 U | 0.012 U | 0.012 UJ | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0056 UJ | 0.0064 UJ | **0.0035 J** | **0.014 J** | 0.0058 U | 0.006 U | 0.0059 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0056 UJ | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.013 U | 0.013 U | 0.011 U | 0.012 U | 0.012 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.022 U | 0.026 U | 0.026 U | 0.022 U | 0.023 U | 0.024 U | 0.024 U |
| Styrene | 100-42-5 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | **0.0058** | 0.0058 U | 0.006 U | 0.0059 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0056 UJ | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0056 U | 0.0064 U | 0.0066 U | 0.0056 U | 0.0058 U | 0.006 U | 0.0059 U |
| Total VOCs | TVOC | NE | NE | **0.00046** | **0.0045** | **0.0402** | **0.2855** | ND | ND | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.3 U | **0.4 J** | **0.8** | **0.071 J** | 0.31 U | **0.037 J** | 0.32 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.3 U | **2.3** | **0.11 J** | **0.078 J** | 0.31 U | **0.019 J** | 0.32 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.3 U | **1.8** | **0.25 J** | **0.15 J** | 0.31 U | **0.071 J** | 0.32 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.3 U | **2.2** | **0.05 J** | **0.027 J** | 0.31 U | 0.32 U | 0.32 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.3 U | **7** | **0.35 J** | **0.27 J** | 0.31 U | **0.13 J** | 0.32 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.3 U | **0.99** | **0.42** | **0.17 J** | 0.31 U | **0.038 J** | 0.32 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.3 U | **1.5** | **0.2 J** | **0.14 J** | 0.31 U | **0.018 J** | 0.32 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB04C/MW-4 | GPEC-SB05 | GPEC-SB05S/MW-5S | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D |
| | | | Sample Name | GPEC-SB-4C (113-115) | GPEC-SB-5 (3-4) | GPEC-SB-5S (32-34) | GPEC-SB-5C (8-10) | GPEC-SB-5C (50-52) | GPEC-SB-5C (76-78) | GPEC-SB-5C (100-102) |
| | | | Start Depth | 113 | 3 | 32 | 8 | 50 | 76 | 100 |
| | | | End Depth | 115 | 4 | 34 | 10 | 52 | 78 | 102 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/1/2009 | 4/13/2009 | 5/8/2009 | 5/5/2009 | 5/6/2009 | 5/7/2009 | 5/7/2009 |
| | | | Parent Sample Code | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.3 U | **3.8** | **0.14 J** | **0.31** | 0.31 U | 0.32 U | 0.32 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.3 U | **5** | **0.73** | **0.56** | 0.31 U | **0.16 J** | 0.32 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.3 U | **6.8** | **0.66** | **0.38** | 0.31 U | **0.22 J** | 0.32 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.3 U | **3.6** | **0.26 J** | **0.13 J** | 0.31 U | **0.1 J** | 0.32 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.3 U | **4.1** | **0.18 J** | **0.12 J** | 0.31 U | **0.083 J** | 0.32 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.3 U | **4.1** | **0.14 J** | **0.097 J** | 0.31 U | **0.06 J** | 0.32 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.3 U | **1.7** | **0.052 J** | **0.037 J** | 0.31 U | 0.32 U | 0.32 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.3 U | **3.8** | **0.29 J** | **0.13 J** | 0.31 U | **0.11 J** | 0.32 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.3 U | **1.1** | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.3 U | **2.5 J** | **0.053 J** | **0.044 J** | 0.31 U | 0.32 U | 0.32 U |
| Total PAHs | TPAH | NE | NE | ND | **52.69** | **4.685** | **2.714** | ND | **1.046** | ND |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.18 J** | **0.24 J** | **0.15 J** | **0.056 J** | 0.31 U | **0.1 J** | **0.084 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Carbazole | 86-74-8 | NE | NE | 0.3 U | **0.52 J** | **0.026 J** | **0.026 J** | 0.31 U | 0.32 U | 0.32 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.3 U | **0.82** | 0.35 U | **0.051 J** | 0.31 U | 0.32 U | 0.32 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.75 U | 1.7 U | 0.88 U | 0.73 U | 0.77 U | 0.79 U | 0.79 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.75 U | 1.7 U | 0.88 U | 0.73 U | 0.77 U | 0.79 U | 0.79 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.9 U | 4.3 U | 2.2 U | 1.9 U | 1.9 U | 2 U | 2 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.3 U | 0.68 U | 0.35 U | 0.29 U | 0.31 U | 0.32 U | 0.32 U |
| Total SVOCs | TSVOC | NE | NE | **0.18** | **54.27** | **4.861** | **2.847** | ND | **1.146** | **0.084** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB04C/MW-4 | GPEC-SB05 | GPEC-SB05S/MW-5S | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D | GPEC-SB05C/MW-5D |
| | | | Sample Name | GPEC-SB-4C (113-115) | GPEC-SB-5 (3-4) | GPEC-SB-5S (32-34) | GPEC-SB-5C (8-10) | GPEC-SB-5C (50-52) | GPEC-SB-5C (76-78) | GPEC-SB-5C (100-102) |
| | | | Start Depth | 113 | 3 | 32 | 8 | 50 | 76 | 100 |
| | | | End Depth | 115 | 4 | 34 | 10 | 52 | 78 | 102 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/1/2009 | 4/13/2009 | 5/8/2009 | 5/5/2009 | 5/6/2009 | 5/7/2009 | 5/7/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.019 U | **0.014 J** | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.019 U | 0.022 U | 0.022 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.014** | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3270** | **6700** | **7210** | **4710** | **2570** | **3500** | **2900** |
| Antimony | 7440-36-0 | NE | NE | 4.6 UJ | 5.2 UJ | 5.4 UJ | 4.4 UJ | 4.7 UJ | 4.7 UJ | 4.7 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | 5.8 UJ | **4.5 J** | **7.8 J** | 5.6 U | 6 U | **8.1 J** | 6 U |
| Barium | 7440-39-3 | 10000 | 820 | **24.2** | **71.7** | **53** | **37.1** | **22.2** | **22.3** | **14.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.16 J** | **0.35 J** | **0.41 J** | **0.52 J** | **0.12 J** | **0.17 J** | **0.14 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.4 U | 1.6 U | 1.6 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **8190** | **4010** | **16700 J** | **4740 J** | **12800 J** | **9690 J** | **4170 J** |
| Chromium | 7440-47-3 | NE | NE | **6.3** | **17.1** | **17.5 J** | **10.9 J** | **6.6 J** | **7.3 J** | **6 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.92 U | 0.97 U | 1.1 U | 0.92 U | 0.96 U | **0.96 J** | 0.94 U |
| Cobalt | 7440-48-4 | NE | NE | **3.5** | **8** | **7** | **7.6** | **2.7** | **3.5** | **2.7** |
| Copper | 7440-50-8 | 10000 | 1720 | **13.3 J** | **114 J** | **51 J** | **24.5 J** | **9.4 J** | **14.2 J** | **6.7 J** |
| Iron | 7439-89-6 | NE | NE | **8240 J** | **13500 J** | **14500** | **14300** | **6750** | **7580** | **7130** |
| Lead | 7439-92-1 | 3900 | 450 | 4.2 U | **97.6** | **16 J** | **7 J** | 4.3 U | 4.3 U | 4.3 U |
| Magnesium | 7439-95-4 | NE | NE | **4450** | **2190** | **10000** | **4150** | **7000** | **5820** | **3040** |
| Manganese | 7439-96-5 | 10000 | 2000 | **173 J** | **181 J** | **274 J** | **1350 J** | **146 J** | **131 J** | **102 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.0047 J** | **0.24** | **0.06** | **0.0065 J** | 0.057 U | 0.056 U | 0.058 U |
| Nickel | 7440-02-0 | 10000 | 130 | **7.9 J** | **11.8 J** | **18.6** | **13.3** | **6.2** | **8.4** | **6.1** |
| Potassium | 7440-09-7 | NE | NE | **376 J** | **829 J** | **2050** | **830** | **471** | **871** | **452** |
| Selenium | 7782-49-2 | 6800 | 4 | 10.4 UJ | 11.7 UJ | 12.3 UJ | 10 UJ | 10.7 UJ | 10.7 UJ | 10.7 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.4 U | **0.23 J** | 1.6 U | **0.15 J** | 1.4 U | 1.4 U | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **606** | **410** | **651** | **164** | **109** | **161** | **190** |
| Thallium | 7440-28-0 | NE | NE | **1.1 J** | **2 J** | 4.9 U | **1.2 J** | 4.3 U | **1.4 J** | 4.3 U |
| Vanadium | 7440-62-2 | NE | NE | **8.9** | **22.2** | **22.8** | **17.2** | **7.8** | **9.6** | **8.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | 14.8 UJ | **216 J** | **53.2 J** | **139 J** | **16.1 J** | **19.9 J** | **13.2 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.22 U | 0.25 U | 0.26 U | 0.22 U | 0.23 U | 0.24 U | 0.23 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **86.8** | **82.4** | **75** | **86.7** | **83.5** | **80.9** | **85.2** |
| Total Organic Carbon | TOC | NE | NE | **6200** | **33800** | **10900** | **4010** | **7810** | **7010** | **2720** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB104 | GPEC-SB104 | GPEC-SB104 | GPEC-SB105 | GPEC-SB105 | GPEC-SB105 |
| | | | Sample Name | GPEC-SB-104 (4-5) | GPEC-SB-104 (32.5-33) | GPEC-SB-104(103-105) | GPEC-SB-105 (4-5) | GPEC-SB-105 (39-40) | GPECXX 060210 |
| | | | Start Depth | 4 | 32.5 | 103 | 4 | 39 | 39 |
| | | | End Depth | 5 | 33 | 105 | 5 | 40 | 40 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/17/2010 | 5/25/2010 | 5/27/2010 | 5/17/2010 | 6/2/2010 | 6/2/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB-105 (39-40) |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | **5.5 J** | 18 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0042 U | 24 U | 0.0044 U | 0.0041 U | **10 J** | 27 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0028 U | **55** | 0.0029 U | 0.0027 U | **140** | **200** |
| m,p-Xylene | 108383/106423 | NE | NE | 0.0056 U | **32** | 0.0059 U | 0.0054 U | **120** | **170** |
| o-Xylene | 95-47-6 | NE | NE | 0.0056 U | **22 J** | 0.0059 U | 0.0054 U | **65** | **99** |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | NA | NA | NA | NA | NA | NA |
| Total BTEX | TBTEX | NE | NE | ND | **109** | ND | ND | **340.5** | **469** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.1 U | 580 U | 0.1 U | 0.098 U | 260 U | 640 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | R | 400 U | NA | R | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | 0.028 U | 160 U | 0.029 UJ | 0.027 U | 72 UJ | 180 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Bromoform | 75-25-2 | NE | NE | 0.011 U | 64 U | 0.012 U | 0.011 U | 29 U | 71 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0056 U | 32 U | R | 0.0054 U | R | R |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.028 U | 160 U | 0.029 U | 0.027 U | 72 U | 180 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | R | R | R | R | R | R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.028 U | 160 U | 0.029 UJ | 0.027 U | 72 UJ | 180 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0056 U | 32 U | 0.0059 U | 0.0054 U | 14 U | 36 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0042 U | 24 U | 0.0044 U | 0.0041 U | 11 U | 27 U |
| Chloromethane | 74-87-3 | NE | NE | 0.014 U | 80 U | 0.015 U | 0.014 U | 36 U | 89 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.028 UJ | 160 U | 0.029 U | 0.027 UJ | 72 U | 180 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0042 U | 24 U | 0.0044 U | 0.0041 U | 11 U | 27 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0042 U | 24 U | 0.0044 U | 0.0041 U | 11 U | 27 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0098 U | 56 U | 0.01 U | 0.0095 U | 25 U | 62 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.011 U | 64 U | 0.012 U | 0.011 U | 29 U | 71 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.028 U | 160 U | 0.029 U | 0.027 U | 72 U | 180 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0056 U | 32 U | 0.0059 UJ | 0.0054 U | 14 UJ | 36 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.028 U | 160 U | 0.029 U | 0.027 U | 72 U | 180 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.0034 J** | **60 J** | 0.029 U | 0.027 U | 72 U | 180 U |
| Styrene | 100-42-5 | NE | NE | 0.0056 U | 32 U | 0.0059 U | 0.0054 U | 14 U | 36 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0028 U | 16 U | **0.0021 J** | 0.0027 U | 7.2 U | 18 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.056 U | 320 U | 0.059 UJ | 0.054 U | 140 UJ | 360 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.014 U | 80 U | 0.015 U | 0.014 U | 36 U | 89 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | **0.013** | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0042 U | 24 U | 0.0044 U | 0.0041 U | 11 U | 27 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0028 U | 16 U | 0.0029 U | 0.0027 U | 7.2 U | 18 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.014 U | 80 U | 0.015 U | 0.014 U | 36 U | 89 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.028 U | 160 U | 0.029 U | 0.027 U | 72 U | 180 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.028 U | 160 U | R | 0.027 U | R | R |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0056 U | 32 U | 0.0059 U | 0.0054 U | 14 U | 36 U |
| Total VOCs | TVOC | NE | NE | **0.0164** | **169** | **0.0021** | ND | **340.5** | **469** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.23** | **24.7** | 0.223 U | **0.188 J** | **673** | **593** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.53** | **3.21** | 0.223 U | **0.0532 J** | **86.8** | **81.7** |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.01** | **9.51** | 0.223 U | **0.344** | **238** | **206** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.6** | **1.47** | 0.223 U | **1.4** | **24.3** | **22.2** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **4.9** | **10.7** | 0.223 U | **3.14** | **187** | **167** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.343** | **5.45** | 0.223 U | **0.106 J** | **366** | **325** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.172 J** | **27.3** | 0.223 U | **0.0205 J** | **1920** | **1690** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB104 | GPEC-SB104 | GPEC-SB104 | GPEC-SB105 | GPEC-SB105 | GPEC-SB105 |
| | | | Sample Name | GPEC-SB-104 (4-5) | GPEC-SB-104 (32.5-33) | GPEC-SB-104(103-105) | GPEC-SB-105 (4-5) | GPEC-SB-105 (39-40) | GPECXX 060210 |
| | | | Start Depth | 4 | 32.5 | 103 | 4 | 39 | 39 |
| | | | End Depth | 5 | 33 | 105 | 5 | 40 | 40 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/17/2010 | 5/25/2010 | 5/27/2010 | 5/17/2010 | 6/2/2010 | 6/2/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB-105 (39-40) |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.437** | **53.3** | 0.223 U | **0.0614 J** | **2620** | **2280** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **3.34** | **27.3** | 0.223 U | **0.684** | **885** | **794** |
| Pyrene | 129-00-0 | 1000 | 1000 | **4.19** | **16.1** | 0.223 U | **2.69** | **340** | **305** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.79** | **6.3** | 0.223 U | **1.71** | **120** | **106** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **2.44** | **4.12** | 0.223 U | **1.83** | **76** | **69.4** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **2.2** | **2.29** | 0.223 U | **1.5** | **38.2** | **35.4** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.21** | **1.96** | 0.223 U | **1.46** | **37.5** | **31.9** |
| Chrysene | 218-01-9 | 110 | 1 | **2.55** | **4.91** | 0.223 U | **1.53** | **106** | **98.6** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.57** | **0.554** | 0.223 U | **0.442** | **7.33** | **7.56** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.56** | **1.39** | 0.223 U | **1.24** | **21.9** | **20** |
| Total PAHs | TPAH | NE | NE | **31.072** | **200.564** | ND | **18.3991** | **7747.03** | **6832.76** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Azobenzene | 103-33-3 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Benzidine | 92-87-5 | NE | NE | R | R | R | R | R | R |
| Benzoic acid | 65-85-0 | NE | 2.7 | R | R | R | R | R | R |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.624** | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.195 U | 0.235 U | **0.0223 J** | 0.205 U | 5.47 U | 5.11 U |
| Carbazole | 86-74-8 | NE | NE | **0.343** | **0.16 J** | 0.223 U | **0.0368 J** | **6.89** | **5.83** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.277** | **0.996** | 0.223 U | **0.102 J** | **35.1** | **39.8** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.195 U | 0.235 U | **0.0134 J** | 0.205 U | 5.47 U | 5.11 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.78 U | 0.939 U | 0.891 U | 0.819 U | 21.9 U | 20.4 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.78 UJ | 0.939 UJ | 0.891 UJ | 0.819 UJ | 21.9 UJ | 20.4 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | **0.0468 J** | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.39 U | 0.47 U | 0.446 U | 0.409 U | 10.9 U | 10.2 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.78 UJ | 0.939 UJ | 0.891 UJ | 0.819 UJ | 21.9 UJ | 20.4 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Pyridine | 110-86-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.195 U | 0.235 U | 0.223 U | 0.205 U | 5.47 U | 5.11 U |
| Total SVOCs | TSVOC | NE | NE | **32.3628** | **201.72** | **0.0357** | **18.5379** | **7789.02** | **6878.39** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB104 | GPEC-SB104 | GPEC-SB104 | GPEC-SB105 | GPEC-SB105 | GPEC-SB105 |
| | | | Sample Name | GPEC-SB-104 (4-5) | GPEC-SB-104 (32.5-33) | GPEC-SB-104(103-105) | GPEC-SB-105 (4-5) | GPEC-SB-105 (39-40) | GPECXX 060210 |
| | | | Start Depth | 4 | 32.5 | 103 | 4 | 39 | 39 |
| | | | End Depth | 5 | 33 | 105 | 5 | 40 | 40 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/17/2010 | 5/25/2010 | 5/27/2010 | 5/17/2010 | 6/2/2010 | 6/2/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB-105 (39-40) |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.0189 J** | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.0185 U | 0.0207 UJ | 0.0191 U | 0.019 U | 0.0479 UJ | 0.0711 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.0189** | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5800 J** | **7800 J** | **7200** | **4500 J** | **8100** | **9100** |
| Antimony | 7440-36-0 | NE | NE | **1.1 J** | 2.3 UJ | **0.62 J** | 2.1 UJ | **5.2 J** | **4 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **11 J** | **15 J** | **3.8 J** | **1.4 J** | **51 J** | **53 J** |
| Barium | 7440-39-3 | 10000 | 820 | **93 J** | **110 J** | **37** | **54 J** | **200** | **220** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.64** | **1.2** | **0.95** | **0.53** | **0.92** | **1.2** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.17 J** | **0.14 J** | 0.43 U | 0.42 U | **1.5** | **1.3** |
| Calcium | 7440-70-2 | NE | NE | **5400 J** | **3300 J** | **1800 J** | **3400 J** | **7200 J** | **6600 J** |
| Chromium | 7440-47-3 | NE | NE | **16 J** | **30 J** | **19 J** | **12 J** | **39 J** | **39 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.9 U | 1 U | R | 0.87 U | R | R |
| Cobalt | 7440-48-4 | NE | NE | **6 J** | **7.5 J** | **8.7** | **4.3 J** | **8.7** | **9.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **130 J** | **120 J** | R | **12 J** | R | R |
| Iron | 7439-89-6 | NE | NE | R | R | **22000 J** | R | **17000 J** | **18000 J** |
| Lead | 7439-92-1 | 3900 | 450 | **570 J** | **61 J** | **29 J** | **21 J** | **430 J** | **390 J** |
| Magnesium | 7439-95-4 | NE | NE | **3700 J** | **4200 J** | **2700** | **2500 J** | **3500** | **4400** |
| Manganese | 7439-96-5 | 10000 | 2000 | **310 J** | **200 J** | **300 J** | **250 J** | **600 J** | **500 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.69** | **4.5** | 0.077 UJ | **0.12** | **2.2** | **1.6** |
| Nickel | 7440-02-0 | 10000 | 130 | **21 J** | **36 J** | **15** | **15 J** | **60** | **61** |
| Potassium | 7440-09-7 | NE | NE | **1200** | **4300** | **1500 J** | **1400** | **1700** | **2900 J** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.23 J** | **3** | 0.87 U | 0.84 U | **7.4** | **8** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.34 J** | **1.5** | **0.35 J** | **0.081 J** | **2.1** | **2.8** |
| Sodium | 7440-23-5 | NE | NE | **190** | **830** | **940 J** | **250** | **700 J** | **720 J** |
| Thallium | 7440-28-0 | NE | NE | **0.32 J** | **0.29 J** | 0.87 U | 0.84 U | **0.53 J** | **0.63 J** |
| Vanadium | 7440-62-2 | NE | NE | **22 J** | **21 J** | **30** | **13 J** | **24** | **29** |
| Zinc | 7440-66-6 | 10000 | 2480 | **130 J** | **120 J** | **45** | **28 J** | **520** | **490** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **89** | **78** | **85** | **92** | **69** | **70** |
| Total Organic Carbon | TOC | NE | NE | **4.56 J** | **0.624 J** | **0.7 J** | **0.719 J** | **5.35 J** | **4.95 J** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **Phase 1** |
| **Location Name** | | | | **GPEC-SB105** | **GPEC-SB105** | **GPEC-SB105** | **GPEC-SB106** | **GPEC-SB106** | **GPEC-SB106** | **GPEC-SB206** |
| **Sample Name** | | | | **GPEC-SB-105 (79-80)** | **GPEC-SB-105 (88-89)** | **GPEC-SB-105 (103-105)** | **GPEC-SB-106 (4-5)** | **GPEC-SB-106 (102-103)** | **GPEC-SB-106 (104-105)** | **GPEC-SB206 (7-8)** |
| **Start Depth** | | | | **78** | **88** | **103** | **4** | **102** | **104** | **7** |
| **End Depth** | | | | **80** | **89** | **105** | **5** | **103** | **105** | **8** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **6/2/2010** | **6/2/2010** | **6/2/2010** | **5/17/2010** | **6/8/2010** | **6/8/2010** | **6/25/2012** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 1.1 U | 45 U | 0.0048 U | 0.0041 U | **24 J** | **0.0043 J** | 0.00599 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **1.5** | **200** | 0.0032 U | 0.0027 U | **54** | **0.0093** | 0.00599 U |
| m,p-Xylene | 108383/106423 | NE | NE | **0.68 J** | **120** | 0.0064 U | 0.0054 U | **69** | **0.0092** | NA |
| o-Xylene | 95-47-6 | NE | NE | 1.5 U | **77** | 0.0064 U | 0.0054 U | **36 J** | **0.0054 J** | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | NA | NA | NA | NA | NA | NA | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **2.18** | **397** | ND | ND | **183** | **0.0282** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 27 U | 11000 U | 0.12 U | 0.098 U | 1000 U | 0.11 U | 0.03 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | R | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | 7.6 UJ | 300 UJ | 0.032 UJ | 0.027 U | 290 U | 0.031 U | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Bromoform | 75-25-2 | NE | NE | 3 U | 120 U | 0.013 U | 0.011 U | 120 U | 0.012 U | 0.00599 U |
| Bromomethane | 74-83-9 | NE | NE | R | R | R | 0.0054 U | R | R | 0.00599 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 7.6 U | 300 U | 0.032 U | 0.027 U | 290 U | 0.031 U | 0.03 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | R | R | R | R | R | R | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 7.6 UJ | 300 UJ | 0.032 UJ | 0.027 U | **77 J** | **0.0083 J** | 0.00599 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 1.5 U | 60 U | 0.0064 U | 0.0054 U | 58 U | 0.0062 U | 0.00599 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 1.1 U | 45 U | 0.0048 U | 0.0041 U | 44 U | 0.0046 U | 0.00599 U |
| Chloromethane | 74-87-3 | NE | NE | 3.8 U | 150 U | 0.016 U | 0.014 U | 140 U | 0.015 U | 0.00599 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.012 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 7.6 U | 300 U | 0.032 U | 0.027 UJ | 290 U | 0.031 U | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 1.1 U | 45 U | 0.0048 U | 0.0041 U | 44 U | 0.0046 U | 0.00599 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 1.1 U | 45 U | 0.0048 U | 0.0041 U | 44 U | 0.0046 U | 0.00599 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 2.7 U | 100 U | 0.011 U | 0.0095 U | 100 U | 0.011 U | 0.00599 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 3 U | 120 U | 0.013 U | 0.011 U | 120 U | 0.012 U | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 7.6 U | 300 U | 0.032 U | 0.027 U | 290 U | 0.031 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 1.5 UJ | 60 UJ | 0.0064 UJ | 0.0054 U | 58 U | 0.0062 U | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 7.6 U | 300 U | 0.032 U | 0.027 U | 290 U | 0.031 U | 0.00599 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 7.6 U | 300 U | 0.032 U | **0.0029 J** | **49 J** | 0.031 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 1.5 U | 60 U | 0.0064 U | 0.0054 U | **38 J** | 0.0062 U | 0.00599 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 15 UJ | 600 UJ | 0.064 UJ | 0.054 U | 580 UJ | 0.062 UJ | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 3.8 U | 150 U | 0.016 U | 0.014 U | 140 U | 0.015 U | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 1.1 U | 45 U | 0.0048 U | 0.0041 U | 44 U | 0.0046 U | 0.00599 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.76 U | 30 U | 0.0032 U | 0.0027 U | 29 U | 0.0031 U | 0.00599 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 3.8 U | 150 U | 0.016 U | 0.014 U | 140 U | 0.015 U | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 7.6 U | 300 U | 0.032 U | 0.027 U | 290 U | 0.031 U | NA |
| Vinyl acetate | 108-05-4 | NE | NE | R | R | R | 0.027 U | 290 U | 0.031 U | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 1.5 U | 60 U | 0.0064 U | 0.0054 U | 58 U | 0.0062 U | 0.00599 U |
| Total VOCs | TVOC | NE | NE | **2.18** | **397** | ND | **0.0029** | **347** | **0.0365** | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **50.1** | **219** | 0.237 U | **0.0116 J** | **51.7** | **4.63** | **0.05** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **9** | **321** | 0.237 U | 0.193 U | **457** | **27.7** | 0.04 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **25.1** | **229** | 0.237 U | **0.0271 J** | **177** | **16** | **0.118** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **4.1 J** | **43.2** | 0.237 U | **0.0967 J** | **31.5** | **2.54** | **0.346** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **24** | **224** | 0.237 U | **0.263** | **186** | **16** | **0.941** |
| Fluorene | 86-73-7 | 1000 | 386 | **31** | **279** | 0.237 U | **0.0116 J** | **207** | **20** | **0.038 J** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **46.3** | **262** | 0.237 U | 0.193 U | **1210** | **68.2** | **0.068** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | Phase 1 |
| | | | Location Name | GPEC-SB105 | GPEC-SB105 | GPEC-SB105 | GPEC-SB106 | GPEC-SB106 | GPEC-SB106 | GPEC-SB206 |
| | | | Sample Name | GPEC-SB-105 (79-80) | GPEC-SB-105 (88-89) | GPEC-SB-105 (103-105) | GPEC-SB-106 (4-5) | GPEC-SB-106 (102-103) | GPEC-SB-106 (104-105) | GPEC-SB206 (7-8) |
| | | | Start Depth | 78 | 88 | 103 | 4 | 102 | 104 | 7 |
| | | | End Depth | 80 | 89 | 105 | 5 | 103 | 105 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/2/2010 | 6/2/2010 | 6/2/2010 | 5/17/2010 | 6/8/2010 | 6/8/2010 | 6/25/2012 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **127** | **3140** | **0.0142 J** | **0.0232 J** | **2570** | **124** | **0.125** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **88.2** | **851** | 0.237 U | **0.128 J** | **775** | **59.9** | **0.279** |
| Pyrene | 129-00-0 | 1000 | 1000 | **42.9** | **387** | 0.237 U | **0.213** | **382** | **29.4** | **0.816** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **13** | **132** | 0.237 U | **0.128 J** | **99** | **8.22** | **0.537** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **10.5** | **109** | 0.237 U | **0.116 J** | **83.2** | **7.12** | **0.745** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **4 J** | **65.7** | 0.237 U | **0.132 J** | **42** | **4.22** | **0.534** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **5.8** | **36.3** | 0.237 U | **0.0928 J** | **38.1** | **2.31** | **0.538** |
| Chrysene | 218-01-9 | 110 | 1 | **11.3** | **113** | 0.237 U | **0.132 J** | **73.6** | **6.72** | **0.519** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1 J** | **13.2** | 0.237 U | **0.0503 J** | **8** | **0.681 J** | **0.151** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **3 J** | **34.4** | 0.237 U | **0.0851 J** | **24.6** | **2.18 J** | **0.335** |
| Total PAHs | TPAH | NE | NE | **496.3** | **6458.8** | **0.0142** | **1.5104** | **6415.7** | **399.821** | **6.14** |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | NA |
| Azobenzene | 103-33-3 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | NA |
| Benzidine | 92-87-5 | NE | NE | R | R | R | R | R | R | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | R | R | R | R | R | R | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | **0.083** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 5 U | 9.6 U | **0.0711 J** | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Carbazole | 86-74-8 | NE | NE | 5 U | **4.42 J** | 0.237 U | **0.0116 J** | **1.82 J** | 2.27 U | **0.025 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **5.5** | **55.1** | 0.237 U | **0.00774 J** | **42.8** | **3.36** | **0.036 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 5 U | 9.6 U | **0.00948 J** | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 20 U | 38.4 U | 0.948 U | 0.774 U | 17.4 U | 9.08 U | 0.04 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 20 UJ | 38.4 UJ | 0.948 UJ | 0.774 UJ | 17.4 UJ | 9.08 UJ | 0.04 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | R |
| Hexachloroethane | 67-72-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Isophorone | 78-59-1 | NE | 4.4 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 UJ | 0.04 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 10 U | 19.2 U | 0.474 U | 0.387 U | 8.69 UJ | 4.54 UJ | 0.04 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 20 UJ | 38.4 UJ | 0.948 UJ | 0.774 UJ | 17.4 UJ | 9.08 UJ | 0.04 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Pyridine | 110-86-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 5 U | 9.6 U | 0.237 U | 0.193 U | 4.35 U | 2.27 U | 0.04 U |
| Total SVOCs | TSVOC | NE | NE | **501.8** | **6518.32** | **0.09478** | **1.52974** | **6460.32** | **403.181** | **6.284** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI | Phase 1 |
| | | | Location Name | GPEC-SB105 | GPEC-SB105 | GPEC-SB105 | GPEC-SB106 | GPEC-SB106 | GPEC-SB106 | GPEC-SB106 | GPEC-SB206 |
| | | | Sample Name | GPEC-SB-105 (79-80) | GPEC-SB-105 (88-89) | GPEC-SB-105 (103-105) | GPEC-SB-106 (4-5) | GPEC-SB-106 (102-103) | GPEC-SB-106 (104-105) | GPEC-SB206 (7-8) | |
| | | | Start Depth | 78 | 88 | 103 | 4 | 102 | 104 | 7 | |
| | | | End Depth | 80 | 89 | 105 | 5 | 103 | 105 | 8 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 6/2/2010 | 6/2/2010 | 6/2/2010 | 5/17/2010 | 6/8/2010 | 6/8/2010 | 6/25/2012 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.0807 U | 0.157 U | 0.0211 U | 0.0181 U | 0.192 U | 0.0206 U | 0.023 U | |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | 0.023 U | |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | 0.023 U | |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | 0.058 U | |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | 0.00461 U | |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | 0.058 U | |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA | 0.056 U | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2100** | **2500** | **5800** | **4300 J** | **2100 J** | **10000 J** | **6320** | |
| Antimony | 7440-36-0 | NE | NE | 2.2 UJ | 2.2 UJ | **5.5** | **0.44 J** | 2.3 UJ | **1.2 J** | 1.27 U | |
| Arsenic | 7440-38-2 | 16 | 16 | **2 J** | **2.1 J** | **9.5 J** | **3.2 J** | **0.95** | **4.6** | **1.78** | |
| Barium | 7440-39-3 | 10000 | 820 | **8.2** | **13** | **28** | **35 J** | **10** | **50** | **68.5** | |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.27** | **0.31** | **0.85 J** | **0.45** | **0.28** | **0.71** | **0.498 J** | |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.45 U | 0.45 U | R | 0.41 U | 0.46 U | 0.45 U | **0.428 J** | |
| Calcium | 7440-70-2 | NE | NE | **12000 J** | **7900 J** | **6200** | **750 J** | R | **1400 J** | **26600** | |
| Chromium | 7440-47-3 | NE | NE | **3.9 J** | **5.4 J** | **15** | **11 J** | **4.9** | **20** | **13.5** | |
| Chromium (VI) | 18540-29-9 | 800 | 19 | R | R | R | 0.87 U | R | R | 1.2 U | |
| Cobalt | 7440-48-4 | NE | NE | **1.9** | **2.7** | **10 J** | **4.6 J** | **2.3** | **11** | **5.77** | |
| Copper | 7440-50-8 | 10000 | 1720 | R | R | **9.7** | **43 J** | **5.6** | **25** | **25.9** | |
| Iron | 7439-89-6 | NE | NE | **7300 J** | **8600 J** | R | R | R | **29000 J** | **11000** | |
| Lead | 7439-92-1 | 3900 | 450 | **5.1 J** | **6.5 J** | R | **13 J** | **4.5** | **25** | **36.9** | |
| Magnesium | 7439-95-4 | NE | NE | **5500** | **4200** | **5600** | **1500 J** | **3400 J** | **2800 J** | **14800** | |
| Manganese | 7439-96-5 | 10000 | 2000 | **210 J** | **220 J** | **2200** | **240 J** | **140** | **430** | **257** | |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.084 UJ | 0.074 UJ | 0.084 UJ | **0.021 J** | 0.047 UJ | **0.01 J** | **0.036** | |
| Nickel | 7440-02-0 | 10000 | 130 | **4.3** | **5.5** | **19 J** | **8.6 J** | **5.1** | **17** | **20.4** | |
| Potassium | 7440-09-7 | NE | NE | **460** | **540** | **2000** | **640** | **510** | **1500** | **1780** | |
| Selenium | 7782-49-2 | 6800 | 4 | 0.9 U | 0.89 U | **4.8 J** | **0.22 J** | **0.22 J** | 0.91 U | 2.54 U | |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.086 J** | **0.074 J** | **0.44 J** | **0.14 J** | **0.1 J** | **0.23 J** | 0.636 U | |
| Sodium | 7440-23-5 | NE | NE | **130 J** | **190 J** | **1000** | **180** | **470** | **1000** | **428** | |
| Thallium | 7440-28-0 | NE | NE | 0.9 U | 0.89 U | 5.2 UJ | **0.28 J** | 0.93 U | 0.91 U | 0.636 U | |
| Vanadium | 7440-62-2 | NE | NE | **7.3** | **10** | **25** | **18 J** | **9.2** | **23** | **16.4** | |
| Zinc | 7440-66-6 | 10000 | 2480 | **11** | **14** | **33** | **23 J** | **11 J** | **58 J** | **57.2** | |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NA | NA | NA | NA | 0.221 U | 0.264 U | 1.2 U | |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Percent Solids | SOLIDS | NE | NE | **82** | **84** | **78** | **92** | **86** | **81** | NA | |
| Total Organic Carbon | TOC | NE | NE | **0.745 J** | **3.69 J** | **1.34 J** | **0.364 J** | R | R | **12000** | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 1** |
| **Location Name** | | | | **GPEC-SB206** | **GPEC-SB206** | **GPEC-SB206** | **GPEC-SB207** | **GPEC-SB207** | **GPEC-SB207** |
| **Sample Name** | | | | **GPEC-SB206 (30-32)** | **GPEC-SB206 (69-70)** | **GPEC-SB206 (86-87)** | **GPEC-SB207 (6-7)** | **GPEC-SB207 (36-37)** | **GPEC-SB207 (75.5-77)** |
| **Start Depth** | | | | **30** | **69** | **86** | **6** | **36** | **75.5** |
| **End Depth** | | | | **32** | **70** | **87** | **7** | **37** | **77** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **6/27/2012** | **6/27/2012** | **6/27/2012** | **6/25/2012** | **6/26/2012** | **6/26/2012** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **5.58** | **4.01** | 0.00625 U | 0.00609 U | **9.21** | **79.9** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **6.45** | **3.57** | 0.013 U | 0.012 U | **4.74** | **52.4** |
| Total BTEX | TBTEX | NE | NE | **12.03** | **7.58** | ND | ND | **13.95** | **132.3** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 1.64 U | 0.588 U | 0.031 U | 0.031 U | 0.687 U | 5.75 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Bromoform | 75-25-2 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Bromomethane | 74-83-9 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.64 U | 0.588 U | 0.031 U | 0.031 U | 0.687 U | 5.75 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Chloromethane | 74-87-3 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 1.64 U | 0.588 U | 0.013 U | 0.012 U | 0.687 U | 5.75 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 1.64 U | 0.588 U | 0.013 U | 0.012 U | 0.687 U | 5.75 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 3.28 U | 1.18 U | 0.013 U | 0.012 U | 1.37 U | 11.5 U |
| Styrene | 100-42-5 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 1.64 U | 0.588 U | 0.00625 U | 0.00609 U | 0.687 U | 5.75 U |
| Total VOCs | TVOC | NE | NE | **12.03** | **7.58** | ND | ND | **13.95** | **132.3** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **265** | **36.6** | 0.042 U | **0.071** | **72.8** | **1450** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **18** | **3.18** | 0.042 U | **0.037 J** | **4.26** | **224** |
| Anthracene | 120-12-7 | 1000 | 1000 | **104** | **17.9** | 0.042 U | **0.208** | **31.7** | **798** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **9.96** | **3.36** | 0.042 U | **0.597** | **2.85** | **134** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **80.5** | **19** | **0.029 J** | **1.55** | **25.4** | **717** |
| Fluorene | 86-73-7 | 1000 | 386 | **155** | **22.8** | 0.042 U | **0.063** | **38.1** | **1060** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **573** | **10.6** | **0.071** | **0.041** | **24.7** | **659** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB206 | GPEC-SB206 | GPEC-SB206 | GPEC-SB207 | GPEC-SB207 | GPEC-SB207 |
| | | | Sample Name | GPEC-SB206 (30-32) | GPEC-SB206 (69-70) | GPEC-SB206 (86-87) | GPEC-SB207 (6-7) | GPEC-SB207 (36-37) | GPEC-SB207 (75.5-77) |
| | | | Start Depth | 30 | 69 | 86 | 6 | 36 | 75.5 |
| | | | End Depth | 32 | 70 | 87 | 7 | 37 | 77 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/27/2012 | 6/27/2012 | 6/27/2012 | 6/25/2012 | 6/26/2012 | 6/26/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **652** | **158** | **1.16** | **0.073** | **27** | **5490** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **318** | **61.6** | **0.032 J** | **0.6** | 95.9 | **2590** |
| Pyrene | 129-00-0 | 1000 | 1000 | **134** | **31.7** | **0.033 J** | **1.35** | **40.7** | **1300** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **40.3** | **9.12** | 0.042 U | **0.823** | **13.5** | **383** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **31.8** | **8.98** | 0.042 U | **1.04** | **11** | **372** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **11** | **3.19** | 0.042 U | **0.811** | **4.59** | **120** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **18.5** | **4.67** | 0.042 U | **0.682** | **4.95** | **200** |
| Chrysene | 218-01-9 | 110 | 1 | **42.8** | **9.44** | 0.042 U | **0.84** | **13.6** | **401** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **4.01 J** | 1.95 U | 0.042 U | **0.25** | **1.19** | **45.6 J** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **8.47** | **2.65** | 0.042 U | **0.539** | **2.59** | **103** |
| Total PAHs | TPAH | NE | NE | **2466.34** | **402.79** | **1.325** | **9.575** | **414.83** | **16046.6** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 5.42 U | 1.95 U | 0.042 U | **0.231** | 0.913 U | 71.7 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Carbazole | 86-74-8 | NE | NE | 5.42 U | 1.95 U | 0.042 U | **0.03 J** | 0.913 U | 71.7 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **13.2** | **2.83** | 0.042 U | **0.022 J** | **3.64** | **124** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | R | R | R | R | R |
| Hexachloroethane | 67-72-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Isophorone | 78-59-1 | NE | 4.4 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 5.42 U | 1.95 U | 0.042 U | 0.04 U | 0.913 U | 71.7 U |
| Total SVOCs | TSVOC | NE | NE | **2479.54** | **405.62** | **1.325** | **9.858** | **418.47** | **16170.6** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB206 | GPEC-SB206 | GPEC-SB206 | GPEC-SB207 | GPEC-SB207 | GPEC-SB207 |
| | | | Sample Name | GPEC-SB206 (30-32) | GPEC-SB206 (69-70) | GPEC-SB206 (86-87) | GPEC-SB207 (6-7) | GPEC-SB207 (36-37) | GPEC-SB207 (75.5-77) |
| | | | Start Depth | 30 | 69 | 86 | 6 | 36 | 75.5 |
| | | | End Depth | 32 | 70 | 87 | 7 | 37 | 77 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/27/2012 | 6/27/2012 | 6/27/2012 | 6/25/2012 | 6/26/2012 | 6/26/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.03 U | 0.023 U | 0.023 U | 0.023 U | 0.026 U | 0.022 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | 0.00456 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | 0.00456 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | 0.00456 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | 0.00456 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | 0.00456 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | 0.057 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | 0.00456 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | 0.00456 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | 0.00456 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | 0.00456 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | 0.00456 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | 0.00456 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | 0.00456 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | 0.00456 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | 0.00456 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | 0.00456 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | 0.00456 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | 0.00456 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | 0.00456 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | 0.00456 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | 0.00456 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | 0.057 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | 0.056 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **13300** | **2670** | **2550** | **6720** | **13100** | **2460** |
| Antimony | 7440-36-0 | NE | NE | **3.89** | 1.28 U | 1.34 U | 1.32 U | 1.47 U | 1.21 U |
| Arsenic | 7440-38-2 | 16 | 16 | **229** | **3.74** | **1.3** | **1.91** | **46.6** | **2.81** |
| Barium | 7440-39-3 | 10000 | 820 | **375** | **11.8 J** | **8.14 J** | **55.5** | **163** | **9.5 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.658 J** | 0.639 U | 0.671 U | **0.349 J** | **0.445 J** | 0.607 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **4.4** | 0.639 U | 0.671 U | **0.222 J** | **0.881** | 0.607 U |
| Calcium | 7440-70-2 | NE | NE | **5260** | **11400** | **14200** | **12400** | **4980** | **11700** |
| Chromium | 7440-47-3 | NE | NE | **246** | **5.09** | **5.46** | **15.2** | **48.2** | **5.09** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.64 U | 1.18 U | 1.25 U | 1.22 U | 1.37 U | 1.15 U |
| Cobalt | 7440-48-4 | NE | NE | **24.9** | **2.46 J** | **2.74** | **4.84** | **14.3** | **2.31 J** |
| Copper | 7440-50-8 | 10000 | 1720 | **1530** | **6.35** | **11.8** | **27.3** | **451** | **4.65** |
| Iron | 7439-89-6 | NE | NE | **26600** | **5970** | **6110** | **10300** | **25200** | **4990** |
| Lead | 7439-92-1 | 3900 | 450 | **593** | **1.66** | **2.24** | **30.8** | **149** | **1.65** |
| Magnesium | 7439-95-4 | NE | NE | **4800** | **5710** | **6560** | **7100** | **6730** | **5620** |
| Manganese | 7439-96-5 | 10000 | 2000 | **206** | **151** | **133** | **168** | **286** | **100** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **3.7 J** | 0.013 U | 0.016 U | **0.095** | **1.52 J** | 0.014 U |
| Nickel | 7440-02-0 | 10000 | 130 | **302** | **5.42** | **6.04** | **18.9** | **84.4** | **5.11** |
| Potassium | 7440-09-7 | NE | NE | **2300** | **526** | **542** | **1690** | **5670** | **526** |
| Selenium | 7782-49-2 | 6800 | 4 | **40.5** | 2.55 U | 2.68 U | 2.64 U | **11.4** | 2.43 U |
| Silver | 7440-22-4 | 6800 | 8.3 | **8.1** | 0.639 U | 0.671 U | 0.66 U | **1.39** | 0.607 U |
| Sodium | 7440-23-5 | NE | NE | **1670** | **188** | **157** | **1660** | **946** | **113 J** |
| Thallium | 7440-28-0 | NE | NE | **0.872** | 0.639 U | 0.671 U | 0.66 U | **0.679 J** | 0.607 U |
| Vanadium | 7440-62-2 | NE | NE | **36.1** | **8.32** | **9.56** | **15.1** | **32.7** | **6.54** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1340** | **11.1** | **16** | **51.5** | **335** | **10.9** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.64 U | 1.18 U | 1.25 U | 1.22 U | 1.37 U | 1.15 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **67000** | **14800** | **9300** | **9800** | **33400** | **50700** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB207 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB209 |
| | | | Sample Name | GPEC-SB207 (86-87) | GPEC-SB208 (6-7) | GPEC-SB208 (29-30) | GPEC-SB208 (86-87) | GPEC-XX071012-2 | GPEC-SB209 (6-7) |
| | | | Start Depth | 86 | 6 | 29 | 86 | 86 | 6 |
| | | | End Depth | 87 | 7 | 30 | 87 | 87 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/26/2012 | 7/3/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 | 6/29/2012 |
| | | | Parent Sample Code | | | | | GPECSB208 (86-87) | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00551 U | 0.00557 U | **0.227** | 0.00606 U | 0.00603 U | 0.00688 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00551 U | 0.00557 U | **0.404** | 0.00606 U | 0.00603 U | 0.00688 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00551 U | 0.00557 U | **20.5** | 0.00606 U | 0.00603 U | 0.00688 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | 0.011 U | **9.59** | 0.012 U | 0.012 U | 0.014 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | **30.721** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.028 U | 0.028 U | 0.294 U | 0.03 U | 0.03 U | 0.034 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Bromoform | 75-25-2 | NE | NE | 0.00551 U | 0.011 U | 0.147 U | 0.00606 U | 0.012 U | 0.014 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00551 U | 0.011 U | 0.147 U | 0.00606 U | 0.012 U | 0.014 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.028 U | 0.00557 U | 0.147 U | 0.012 U | 0.00603 U | 0.00688 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00551 U | 0.00557 U | **0.406** | 0.00606 U | 0.00603 U | 0.00688 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00551 U | 0.00557 U | 0.147 U | 0.012 U | 0.00603 U | 0.00688 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.011 U | 0.011 U | 0.147 U | 0.00606 U | 0.012 U | 0.014 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00551 U | 0.011 U | 0.147 U | 0.00606 U | 0.012 U | 0.014 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00551 U | 0.011 U | 0.294 U | 0.00606 U | 0.012 U | 0.014 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 U | 0.011 U | 0.294 U | 0.012 U | 0.012 U | 0.014 U |
| Styrene | 100-42-5 | NE | NE | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 UJ | **0.021 J** | 0.00688 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | **0.00478 J** | 0.00688 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00551 U | 0.00557 U | 0.147 U | 0.00606 U | 0.00603 U | 0.00688 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **31.127** | ND | **0.02578** | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.036 U | 0.037 U | **39.5** | 0.04 U | 0.04 U | 0.045 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.039** | 0.037 U | **1.75** | 0.04 U | 0.04 U | 0.045 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.036 U | 0.037 U | **15.2** | 0.04 U | 0.04 U | 0.045 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.036 U | **0.037** | **1.46** | 0.04 U | 0.04 U | 0.045 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.036 U | **0.133** | **12.2** | 0.04 U | 0.04 U | **0.187** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.036 U | **0.024 J** | **20.1** | 0.04 U | 0.04 U | 0.045 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.036 U | 0.037 U | **50.1** | 0.04 U | 0.04 U | 0.045 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB207 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB209 |
| | | | Sample Name | GPEC-SB207 (86-87) | GPEC-SB208 (6-7) | GPEC-SB208 (29-30) | GPEC-SB208 (86-87) | GPEC-XX071012-2 | GPEC-SB209 (6-7) |
| | | | Start Depth | 86 | 6 | 29 | 86 | 86 | 6 |
| | | | End Depth | 87 | 7 | 30 | 87 | 87 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/26/2012 | 7/3/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 | 6/29/2012 |
| | | | Parent Sample Code | | | | | GPECSB208 (86-87) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.063** | **0.03 J** | **80.8** | 0.04 U | 0.04 U | 0.045 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.036 U | **0.149** | **49.6** | 0.04 U | 0.04 U | **0.136** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.036 U | **0.127** | **20** | 0.04 U | 0.04 U | **0.15** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.036 U | **0.075** | **7.2** | 0.04 U | 0.04 U | **0.09** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.036 U | **0.044** | **4.13** | 0.04 U | 0.04 U | **0.086** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.036 U | **0.041** | **1.85** | 0.04 U | 0.04 U | **0.061** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.036 U | **0.034 J** | **1.84** | 0.04 U | 0.04 U | **0.094** |
| Chrysene | 218-01-9 | 110 | 1 | 0.036 U | **0.084** | **7.94** | 0.04 U | 0.04 U | **0.093** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.036 U | 0.037 U | **0.708 J** | 0.04 U | 0.04 U | 0.045 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.036 U | **0.03 J** | **1.12** | 0.04 U | 0.04 U | 0.045 U |
| Total PAHs | TPAH | NE | NE | **0.102** | **0.808** | **315.498** | ND | ND | **0.897** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.036 U | **0.033 J** | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Carbazole | 86-74-8 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.036 U | **0.014 J** | **1.72** | 0.04 U | 0.04 U | 0.045 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | R |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | 0.037 U | 0.967 U | 0.04 U | 0.04 U | R |
| Hexachloroethane | 67-72-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.036 U | 0.037 U | 0.967 U | 0.04 U | 0.04 U | 0.045 U |
| Total SVOCs | TSVOC | NE | NE | **0.102** | **0.855** | **317.218** | ND | ND | **0.897** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB207 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB208 | GPEC-SB209 |
| | | | Sample Name | GPEC-SB207 (86-87) | GPEC-SB208 (6-7) | GPEC-SB208 (29-30) | GPEC-SB208 (86-87) | GPEC-XX071012-2 | GPEC-SB209 (6-7) |
| | | | Start Depth | 86 | 6 | 29 | 86 | 86 | 6 |
| | | | End Depth | 87 | 7 | 30 | 87 | 87 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/26/2012 | 7/3/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 | 6/29/2012 |
| | | | Parent Sample Code | | | | | GPECSB208 (86-87) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.021 U | 0.021 U | 0.028 U | 0.023 U | 0.023 U | 0.027 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.053 U | NA | NA | NA | 0.068 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00424 U | NA | NA | NA | 0.00548 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.053 U | NA | NA | NA | 0.068 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | R | NA | NA | NA | 0.058 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2280** | **3480** | **10100** | **2080** | **2270** | **7860** |
| Antimony | 7440-36-0 | NE | NE | 1.1 U | 1.17 U | 1.6 U | 1.26 U | 1.29 U | 1.5 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.768** | **9.05** | **55.1** | **0.486 J** | **1.2** | **6.48** |
| Barium | 7440-39-3 | 10000 | 820 | **9.35 J** | **38.1** | **131** | **8.75 J** | **13.6** | **59.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.55 U | 0.583 U | **0.534 J** | 0.63 U | 0.646 U | **0.327 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.55 U | 0.583 U | **0.799 J** | 0.63 U | 0.646 U | 0.75 U |
| Calcium | 7440-70-2 | NE | NE | **10600** | **3200** | **5430** | **7360** | **7120** | **1790** |
| Chromium | 7440-47-3 | NE | NE | **4.14** | **9.81** | **36** | **3.24** | **5.39** | **19.3** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.1 U | R | R | R | R | 1.38 UJ |
| Cobalt | 7440-48-4 | NE | NE | **2.22** | **1.73 J** | **68.9** | **1.81 J** | **2.14 J** | **3.68** |
| Copper | 7440-50-8 | 10000 | 1720 | **5.1** | **38.8** | **368** | **3.71 J** | **10.3 J** | **30.3** |
| Iron | 7439-89-6 | NE | NE | **4780** | **14300** | **26400** | **4320** | **4700** | **22400** |
| Lead | 7439-92-1 | 3900 | 450 | **1.43** | **9.13** | **152** | **1.2 J** | **3.89 J** | **25.9** |
| Magnesium | 7439-95-4 | NE | NE | **4920** | **2600** | **5130** | **4000** | **3950** | **2400** |
| Manganese | 7439-96-5 | 10000 | 2000 | **102** | **74.7** | **428** | **78.7** | **83.8** | **144** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.014 U | **0.02** | **0.995** | 0.014 U | 0.014 U | **0.08** |
| Nickel | 7440-02-0 | 10000 | 130 | **4.36** | **5.69** | **61.1** | **3.94** | **6.57** | **12.4** |
| Potassium | 7440-09-7 | NE | NE | **433** | **669** | **2410** | **356** | **435** | **1470** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.2 U | 2.33 U | **8.86** | 2.52 U | 2.59 U | 3 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.55 U | 0.583 U | **1.24** | 0.63 U | 0.646 U | 0.75 U |
| Sodium | 7440-23-5 | NE | NE | **82.8 J** | **207** | **2490** | **87.9 J** | **127 J** | **256** |
| Thallium | 7440-28-0 | NE | NE | 0.55 U | 0.583 U | **0.494 J** | 0.63 U | 0.646 U | 0.75 U |
| Vanadium | 7440-62-2 | NE | NE | **5.46** | **14.4** | **94.7** | **4.4** | **5.3** | **21.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **15.8** | **19.3** | **257** | **7.79 J** | **13.3 J** | **32.1** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.1 U | 1.11 U | 1.47 U | 1.21 U | 1.21 U | 1.38 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **1590** | **11000** | **20900** | **1260** | **2510** | **7310** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB209 | GPEC-SB209 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB211 |
| | | | Sample Name | GPEC-SB209 (28-29) | GPEC-SB209 (86-87) | GPEC-SB210 (1-2) | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) | GPEC-SB210 (86-87) | GPEC-SB211 (4-5) |
| | | | Start Depth | 28 | 86 | 1 | 29 | 37 | 86 | 4 |
| | | | End Depth | 29 | 87 | 2 | 30 | 38 | 87 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/9/2012 | 7/9/2012 | 7/18/2012 | 7/9/2012 | 7/9/2012 | 7/9/2012 | 7/18/2012 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **0.015** | 0.013 U | 0.011 U | 0.012 U | 0.013 U | 0.012 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | **0.015** | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.034 U | 0.032 U | 0.028 U | 0.029 U | 0.033 U | 0.029 U | 0.028 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Bromoform | 75-25-2 | NE | NE | 0.014 U | 0.013 U | 0.00552 U | 0.012 U | 0.013 U | 0.012 U | 0.00567 U |
| Bromomethane | 74-83-9 | NE | NE | 0.014 U | 0.013 U | 0.00552 U | 0.012 U | 0.013 U | 0.012 U | 0.00567 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00673 U | 0.00629 U | 0.011 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.00711** | 0.00629 U | 0.00552 U | **0.00633** | **0.00746** | 0.00581 U | 0.00567 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00673 U | 0.00629 U | 0.011 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.011 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.014 U | 0.013 U | 0.00552 U | 0.012 U | 0.013 U | 0.012 U | 0.00567 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.014 U | 0.013 U | 0.00552 U | 0.012 U | 0.013 U | 0.012 U | 0.00567 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.014 U | 0.013 U | 0.00552 U | 0.012 U | 0.013 U | 0.012 U | 0.00567 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.014 U | 0.013 U | 0.011 U | 0.012 U | 0.013 U | 0.012 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00673 U | **0.00486 J** | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00673 U | 0.00629 U | 0.00552 U | 0.00574 U | 0.00653 U | 0.00581 U | 0.00567 U |
| Total VOCs | TVOC | NE | NE | **0.02211** | **0.00486** | ND | **0.00633** | **0.00746** | ND | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.82** | 0.042 U | **0.066** | 0.038 U | **0.563** | 0.038 U | **0.09** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.162** | 0.042 U | **0.495** | 0.038 U | **0.091** | 0.038 U | **0.565** |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.6** | 0.042 U | **0.368** | 0.038 U | **0.684** | 0.038 U | **0.768** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.529** | 0.042 U | **1.19** | **0.039** | **0.233** | 0.038 U | **1.64** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **2.75** | 0.042 U | **1.98** | **0.059** | **0.981** | 0.038 U | **5.4** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.802** | 0.042 U | **0.148** | 0.038 U | **0.212** | 0.038 U | **0.289** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.733** | 0.042 U | **0.139** | 0.038 U | **0.242** | 0.038 U | **0.168** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB209 | GPEC-SB209 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB211 |
| | | | Sample Name | GPEC-SB209 (28-29) | GPEC-SB209 (86-87) | GPEC-SB210 (1-2) | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) | GPEC-SB210 (86-87) | GPEC-SB211 (4-5) | |
| | | | Start Depth | 28 | 86 | 1 | 29 | 37 | 86 | 4 | |
| | | | End Depth | 29 | 87 | 2 | 30 | 38 | 87 | 5 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/9/2012 | 7/9/2012 | 7/18/2012 | 7/9/2012 | 7/9/2012 | 7/9/2012 | 7/18/2012 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.717** | 0.042 U | **0.266** | **0.075** | **0.322** | 0.038 U | **0.505** | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **4.73** | 0.042 U | **0.898** | **0.046** | **1.38** | 0.038 U | **2.61** | |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.79** | 0.042 U | **1.92** | **0.287** | **1.67** | 0.038 U | **4.43** | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.65** | 0.042 U | **1.27** | **0.053** | **0.871** | 0.038 U | **2.78** | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.11** | 0.042 U | **1.75** | **0.063** | **0.43** | 0.038 U | **3.37** | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.58** | 0.042 U | **1.24** | **0.046** | **0.221** | 0.038 U | **2.32** | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.32** | 0.042 U | **1.44** | **0.035 J** | **0.191** | 0.038 U | **2.38** | |
| Chrysene | 218-01-9 | 110 | 1 | **2.96** | 0.042 U | **1.41** | **0.056** | **1.04** | 0.038 U | **2.85** | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.341** | 0.042 U | **0.524** | 0.038 U | **0.103** | 0.038 U | **0.604** | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.335** | 0.042 U | **1.03** | **0.031 J** | **0.154** | 0.038 U | **1.58** | |
| Total PAHs | TPAH | NE | NE | **24.929** | ND | **16.134** | **0.79** | **9.388** | ND | **32.349** | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA | |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | **0.067 J** | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Carbazole | 86-74-8 | NE | NE | 0.044 U | 0.042 U | **0.07** | 0.038 U | 0.043 U | 0.038 U | **0.076** | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.276** | 0.042 U | **0.05** | 0.038 U | **0.094** | 0.038 U | **0.108** | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.044 U | 0.042 U | **0.019 J** | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.044 U | 0.042 U | 0.036 U | 0.038 U | 0.043 U | 0.038 U | 0.075 U | |
| Total SVOCs | TSVOC | NE | NE | **25.205** | ND | **16.273** | **0.79** | **9.482** | ND | **32.6** | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB209 | GPEC-SB209 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB210 | GPEC-SB211 |
| | | | Sample Name | GPEC-SB209 (28-29) | GPEC-SB209 (86-87) | GPEC-SB210 (1-2) | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) | GPEC-SB210 (86-87) | GPEC-SB211 (4-5) | |
| | | | Start Depth | 28 | 86 | 1 | 29 | 37 | 86 | 4 | |
| | | | End Depth | 29 | 87 | 2 | 30 | 38 | 87 | 5 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/9/2012 | 7/9/2012 | 7/18/2012 | 7/9/2012 | 7/9/2012 | 7/9/2012 | 7/18/2012 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.025 U | 0.023 U | 0.022 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.025 U | 0.023 U | 0.022 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.025 U | 0.023 U | 0.022 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.025 U | 0.023 U | 0.022 UJ | 0.021 U | 0.025 U | 0.023 U | 0.023 UJ | |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.054 U | NA | NA | NA | 0.056 U | |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | **0.00453** | NA | NA | NA | **0.00432 J** | |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | **0.014** | NA | NA | NA | **0.016** | |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00435 U | NA | NA | NA | **0.028** | |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00435 U | NA | NA | NA | 0.00449 U | |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.054 U | NA | NA | NA | 0.056 U | |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | 0.047 U | NA | NA | NA | 0.054 U | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7370** | **2850** | **6780** | **6360** | **5570** | **3130** | **4220** | |
| Antimony | 7440-36-0 | NE | NE | **0.669 J** | 1.29 U | **0.503 J** | 1.13 U | 1.39 U | 1.28 U | 1.13 U | |
| Arsenic | 7440-38-2 | 16 | 16 | **83.8** | **0.908** | **20.3** | **95.8** | **15.6** | **3.68** | **1.02** | |
| Barium | 7440-39-3 | 10000 | 820 | **218** | **18.8** | **418** | **73.4** | **39.1** | **28.4** | **24.8** | |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.31 J** | 0.643 U | **0.777** | **0.318 J** | **0.283 J** | 0.639 U | 0.563 U | |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.28** | 0.643 U | **2.98** | 0.566 U | **0.286 J** | 0.639 U | 0.563 U | |
| Calcium | 7440-70-2 | NE | NE | **4380** | **12100** | **7240** | **3320** | **9120** | **13000** | **7990** | |
| Chromium | 7440-47-3 | NE | NE | **15.9** | **5** | **28** | **11.3** | **14.4** | **7.7** | **8.65** | |
| Chromium (VI) | 18540-29-9 | 800 | 19 | R | R | 1.1 UJ | R | R | R | 1.13 UJ | |
| Cobalt | 7440-48-4 | NE | NE | **8.55** | **2.31 J** | **7.2** | **36** | **4.99** | **3.49** | **3.53** | |
| Copper | 7440-50-8 | 10000 | 1720 | **555** | **5.28** | **395** | **42.7** | **105** | **26.2** | **8.12** | |
| Iron | 7439-89-6 | NE | NE | **11700** | **5470** | **23500** | **21900** | **11600** | **9820** | **11700** | |
| Lead | 7439-92-1 | 3900 | 450 | **232** | **3.06** | **988** | **21.3** | **36.5** | **7.82** | **3.07** | |
| Magnesium | 7439-95-4 | NE | NE | **3380** | **5430** | **3690** | **4920** | **3940** | **5800** | **3790** | |
| Manganese | 7439-96-5 | 10000 | 2000 | **149** | **128** | **371 J** | **387** | **175** | **187** | **236 J** | |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.56** | 0.015 U | **0.366** | **0.05** | **0.24** | 0.014 U | **0.189** | |
| Nickel | 7440-02-0 | 10000 | 130 | **74.5** | **4.47** | **27.4** | **28.9** | **19.5** | **9.44** | **7.49** | |
| Potassium | 7440-09-7 | NE | NE | **1360** | **556** | **1120** | **2910** | **1200** | **583** | **563** | |
| Selenium | 7782-49-2 | 6800 | 4 | **7.38** | 2.57 U | **1.49 J** | 2.26 U | **2.33 J** | 2.56 U | 2.25 U | |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.23** | 0.643 U | **1.14** | 0.566 U | **0.296 J** | 0.639 U | 0.563 U | |
| Sodium | 7440-23-5 | NE | NE | **1400** | **184** | **2030** | **1810** | **546** | **201** | **168** | |
| Thallium | 7440-28-0 | NE | NE | **0.756** | 0.643 U | **0.496 J** | **0.988** | 0.697 U | 0.639 U | 0.563 U | |
| Vanadium | 7440-62-2 | NE | NE | **20.4** | **8.01** | **32** | **47.3** | **19.6** | **15.3** | **14.5** | |
| Zinc | 7440-66-6 | 10000 | 2480 | **334** | **12.5** | **517** | **55.2** | **76.1** | **21.9** | **14.1** | |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.35 U | 1.26 U | 1.1 U | 1.15 U | 1.31 U | 1.16 U | 1.13 U | |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Total Organic Carbon | TOC | NE | NE | **66300** | **4530** | **31600** | **13500** | **11400** | **3140** | **16000** | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB211 | GPEC-SB211 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 |
| | | | Sample Name | GPEC-SB211 (37-38) | GPEC-SB211 (79-80) | GPEC-SB212 (1-2) | GPEC-SB212 (28-29) | GPEC-XX071012 | GPEC-SB212 (86-87) |
| | | | Start Depth | 37 | 79 | 1 | 28 | 28 | 86 |
| | | | End Depth | 38 | 80 | 2 | 29 | 29 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/18/2012 | 7/2/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 |
| | | | Parent Sample Code | | | | | GPECSB212 (28-29) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **0.109 J** | 0.00563 U | **32.8** | **0.027 J** | 0.018 UJ | 0.00575 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.266 J** | 0.00563 U | **71.5** | **0.04 J** | 0.018 UJ | 0.00575 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **3.5 J** | 0.00563 U | **14.2** | **0.103** | **0.039 J** | 0.00575 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **4.34 J** | 0.011 U | **133** | **0.136 J** | **0.113 J** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **8.215** | ND | **251.5** | **0.306** | **0.152** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.444 UJ | 0.028 U | 5.99 U | 0.168 U | 0.089 UJ | 0.029 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Bromoform | 75-25-2 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.036 UJ | 0.012 U |
| Bromomethane | 74-83-9 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.036 UJ | 0.012 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.444 UJ | 0.011 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **2.56 J** | **0.00478 J** | 5.99 U | **0.65 J** | **0.034 J** | 0.00575 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.444 UJ | 0.011 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Chloromethane | 74-87-3 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.036 UJ | 0.012 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.444 UJ | 0.00563 UJ | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.036 UJ | 0.012 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.168 U | 0.036 UJ | 0.012 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.444 UJ | 0.00563 UJ | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.444 UJ | 0.00563 UJ | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.889 UJ | 0.011 U | 12 U | 0.168 U | 0.036 UJ | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.444 UJ | 0.00563 U | **36.6** | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.444 UJ | 0.00563 U | 5.99 U | 0.084 U | 0.018 UJ | 0.00575 U |
| Total VOCs | TVOC | NE | NE | **10.775** | **0.00478** | **288.1** | **0.956** | **0.186** | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **5.08 J** | 0.04 U | **100** | **2.31 J** | **8.55 J** | 0.038 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.341 J** | 0.04 U | **481** | **0.234 J** | **0.899 J** | 0.038 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **3.2 J** | 0.04 U | **485** | **2.49 J** | **8.04 J** | 0.038 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.546 J** | 0.04 U | **83.6** | **0.604 J** | **1.8 J** | 0.038 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **4 J** | 0.04 U | **767** | **4.51 J** | **12.9 J** | 0.038 U |
| Fluorene | 86-73-7 | 1000 | 386 | **2.99 J** | 0.04 U | **629** | **2.05 J** | **6.78 J** | 0.038 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **8.86 J** | 0.04 U | **1180** | **2.05 J** | **7.98 J** | 0.038 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB211 | GPEC-SB211 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 |
| | | | Sample Name | GPEC-SB211 (37-38) | GPEC-SB211 (79-80) | GPEC-SB212 (1-2) | GPEC-SB212 (28-29) | GPEC-XX071012 | GPEC-SB212 (86-87) |
| | | | Start Depth | 37 | 79 | 1 | 28 | 28 | 86 |
| | | | End Depth | 38 | 80 | 2 | 29 | 29 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/18/2012 | 7/2/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 |
| | | | Parent Sample Code | | | | | GPECSB212 (28-29) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **10.6 J** | 0.04 U | **1890** | **1.56 J** | **5.88 J** | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **8.84 J** | 0.04 U | **1820** | **9.22 J** | **28.4 J** | 0.038 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **4 J** | 0.04 U | **990** | **4.22 J** | **15.4 J** | 0.038 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.78 J** | 0.04 U | **451** | **2.83 J** | **9.22 J** | 0.038 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.44 J** | 0.04 U | **445** | **1.27 J** | **4.21 J** | 0.038 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.791 J** | 0.04 U | **203** | **0.655 J** | **2.26 J** | 0.038 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.656 J** | 0.04 U | **242** | **0.531 J** | **1.26 J** | 0.038 U |
| Chrysene | 218-01-9 | 110 | 1 | **1.96 J** | 0.04 U | **538** | **3.25 J** | **9.41 J** | 0.038 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.228 J** | 0.04 U | **51.2** | **0.272 J** | **0.882 J** | 0.038 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.425 J** | 0.04 U | **87** | **0.405 J** | **1.21 J** | 0.038 U |
| Total PAHs | TPAH | NE | NE | **55.737** | ND | **10442.8** | **38.461** | **125.081** | ND |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | 0.147 UJ | 0.04 U | **33.1** | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.495 J** | 0.04 U | **68.8** | **0.567 J** | **1.79 J** | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.147 UJ | 0.04 U | R | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.147 UJ | 0.04 U | R | 0.111 U | 0.237 UJ | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.145 J** | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.147 UJ | 0.04 U | 23.8 U | 0.111 U | 0.237 UJ | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **56.377** | ND | **10544.7** | **39.028** | **126.871** | ND |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB211 | GPEC-SB211 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 | GPEC-SB212 |
| | | | Sample Name | GPEC-SB211 (37-38) | GPEC-SB211 (79-80) | GPEC-SB212 (1-2) | GPEC-SB212 (28-29) | GPEC-XX071012 | GPEC-SB212 (86-87) |
| | | | Start Depth | 37 | 79 | 1 | 28 | 28 | 86 |
| | | | End Depth | 38 | 80 | 2 | 29 | 29 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/18/2012 | 7/2/2012 | 7/10/2012 | 7/10/2012 | 7/10/2012 |
| | | | Parent Sample Code | | | | | GPECSB212 (28-29) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.043 UJ | 0.022 U | 0.023 U | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.043 UJ | 0.022 U | 0.023 U | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.043 UJ | 0.022 U | 0.023 U | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.043 UJ | 0.022 U | 0.023 UJ | 0.032 U | 0.07 UJ | 0.022 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.023 U | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.023 U | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.023 U | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.023 U | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.023 U | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.294 U | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.023 U | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.023 U | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.023 U | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.023 U | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.023 U | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.023 U | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.023 U | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.023 U | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.023 U | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.023 U | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.023 U | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.023 U | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.023 U | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.023 U | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.023 U | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.294 U | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | 0.058 U | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **17600 J** | **3380** | **658** | **16400** | **21000 J** | **4590** |
| Antimony | 7440-36-0 | NE | NE | 2.32 UJ | 1.13 U | 1.28 U | 1.74 U | **1.48 J** | 1.16 U |
| Arsenic | 7440-38-2 | 16 | 16 | **16.2 J** | **0.804** | **4.19** | **89.2 J** | **208 J** | **6.15** |
| Barium | 7440-39-3 | 10000 | 820 | **207 J** | **24.8** | **23.9** | **181** | **282 J** | **26.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | **1.27 J** | 0.565 U | **0.291 J** | **0.985** | **0.984 J** | **0.253 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.508 J** | 0.565 U | 0.641 U | **1.35** | **3.07 J** | 0.582 U |
| Calcium | 7440-70-2 | NE | NE | **54100 J** | **14100** | **683** | **9840** | **6830 J** | **6320** |
| Chromium | 7440-47-3 | NE | NE | **52.5 J** | **9.31** | **2.9** | **70** | **107 J** | **11.3** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 2.22 UJ | 1.13 U | 1.2 UJ | R | R | R |
| Cobalt | 7440-48-4 | NE | NE | **16.4 J** | **3.29** | **1.62 J** | **15.5** | **21.6 J** | **4.6** |
| Copper | 7440-50-8 | 10000 | 1720 | **121 J** | **8.68** | **7.49** | **635 J** | **1550 J** | **30** |
| Iron | 7439-89-6 | NE | NE | **47500 J** | **7400** | **1930** | **26000** | **33800 J** | **13700** |
| Lead | 7439-92-1 | 3900 | 450 | **361 J** | **2.35** | **38.9** | **263 J** | **524 J** | **13.7** |
| Magnesium | 7439-95-4 | NE | NE | **25800 J** | **6560** | **122** | **7290** | **7790 J** | **3560** |
| Manganese | 7439-96-5 | 10000 | 2000 | **690 J** | **157** | **6.69** | **368** | **343 J** | **264** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.44 J** | 0.014 U | 0.016 U | **2.08 J** | **3.62 J** | 0.013 U |
| Nickel | 7440-02-0 | 10000 | 130 | **31.1 J** | **7.52** | **9.13** | **132 J** | **246 J** | **15.3** |
| Potassium | 7440-09-7 | NE | NE | **2100 J** | **740** | **117** | **3730** | **4040 J** | **847** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.64 UJ | 2.26 U | 2.56 U | **25.6 J** | **48.8 J** | 2.33 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.16 UJ | 0.565 U | 0.641 U | **2.7 J** | **6.43 J** | 0.582 U |
| Sodium | 7440-23-5 | NE | NE | **1540 J** | **182** | **336** | **3050** | **3680 J** | **181** |
| Thallium | 7440-28-0 | NE | NE | 1.16 UJ | 0.565 U | 0.641 U | **0.81 J** | **1.76 J** | 0.582 U |
| Vanadium | 7440-62-2 | NE | NE | **65.7 J** | **10.2** | **15.9** | **41.2** | **55.5 J** | **13.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **316 J** | **17** | **4.69** | **400 J** | **845 J** | **36.7** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.22 UJ | 1.13 U | 1.2 U | 1.68 U | 3.56 UJ | 1.15 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **31700** | **4250** | **712000** | **34900 J** | **68800 J** | **6510** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB213 | GPEC-SB213 | GPEC-SB213 | GPEC-SB214 | GPEC-SB214 | GPEC-SB214 |
| | | | Sample Name | GPEC-SB213 (1-2) | GPEC-SB213 (14-15) | GPEC-SB213 (85-86) | GPEC-SB214 (5-6) | GPEC-SB214 (7-8) | GPEC-SB214 (30-31) |
| | | | Start Depth | 1 | 14 | 85 | 5 | 7 | 30 |
| | | | End Depth | 2 | 15 | 86 | 6 | 8 | 31 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/2/2012 | 7/2/2012 | 7/2/2012 | 7/14/2012 | 7/14/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | **0.153** | 0.00613 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | **0.271** | 0.00613 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | **0.072 J** | 0.00613 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | 0.013 U | 0.012 U | 0.011 U | **0.233** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | **0.729** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.027 U | 0.032 U | 0.03 U | 0.028 U | 0.114 U | 0.031 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Bromoform | 75-25-2 | NE | NE | 0.00535 U | 0.013 U | 0.012 U | 0.011 U | 0.114 U | 0.00613 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00535 U | 0.013 U | 0.012 U | 0.011 U | 0.114 U | 0.00613 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | **0.661** | **0.024** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.011 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.012 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00535 U | 0.013 U | 0.012 U | 0.011 U | 0.114 U | 0.00613 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00535 U | 0.013 U | 0.012 U | 0.011 U | 0.114 U | 0.00613 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00535 U | 0.013 U | 0.012 U | 0.011 U | 0.114 U | 0.00613 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 U | 0.013 U | 0.012 U | 0.011 U | 0.229 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00535 U | 0.00635 U | 0.00604 U | 0.00556 U | 0.114 U | 0.00613 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | ND | **1.39** | **0.024** |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.118** | 0.042 U | 0.04 U | **0.036 J** | **0.379** | 0.041 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.995** | 0.042 U | 0.04 U | **0.049** | **1** | 0.041 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.584** | 0.042 U | 0.04 U | **0.127** | **2** | 0.041 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.18** | 0.042 U | 0.04 U | **0.041** | **2.23** | 0.041 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **4.24** | **0.156** | 0.04 U | **0.284** | **6.75** | **0.05** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.229** | 0.042 U | 0.04 U | **0.202** | **1.9** | 0.041 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.305** | 0.042 U | **0.038 J** | **0.059** | **0.47** | 0.041 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB213 | GPEC-SB213 | GPEC-SB213 | GPEC-SB214 | GPEC-SB214 | GPEC-SB214 |
| | | | Sample Name | GPEC-SB213 (1-2) | GPEC-SB213 (14-15) | GPEC-SB213 (85-86) | GPEC-SB214 (5-6) | GPEC-SB214 (7-8) | GPEC-SB214 (30-31) |
| | | | Start Depth | 1 | 14 | 85 | 5 | 7 | 30 |
| | | | End Depth | 2 | 15 | 86 | 6 | 8 | 31 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/2/2012 | 7/2/2012 | 7/2/2012 | 7/14/2012 | 7/14/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.571** | **0.065** | **0.111** | **0.2** | **1.45** | **0.054** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.45** | **0.149** | 0.04 U | **0.531** | **7.69** | **0.052** |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.92** | **0.121** | 0.04 U | **0.287** | **8.21** | **0.073** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.62** | **0.061** | 0.04 U | **0.129** | **3.78** | 0.041 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **3.33** | **0.061** | 0.04 U | **0.137** | **4.01** | 0.041 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **3.5** | **0.049** | 0.04 U | **0.097** | **2.51** | 0.041 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.17** | **0.049** | 0.04 U | **0.118** | **2.54** | 0.041 U |
| Chrysene | 218-01-9 | 110 | 1 | **2.81** | **0.074** | 0.04 U | **0.147** | **4.19** | 0.041 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.569** | 0.042 U | 0.04 U | 0.037 U | **0.722** | 0.041 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.21** | 0.042 U | 0.04 U | **0.048** | **1.8** | 0.041 U |
| Total PAHs | TPAH | NE | NE | **29.801** | **0.785** | **0.149** | **2.492** | **51.631** | **0.229** |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.091** | 0.042 U | 0.04 U | **0.04** | **0.179** | 0.041 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Carbazole | 86-74-8 | NE | NE | **0.107** | 0.042 U | 0.04 U | **0.059** | **0.215** | 0.041 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.067** | 0.042 U | 0.04 U | **0.054** | **0.305** | 0.041 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | **0.049** | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.035 U | R | R | R | 0.113 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.035 U | R | R | R | 0.113 U | 0.041 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.035 U | 0.042 U | 0.04 U | 0.037 U | 0.113 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | **30.115** | **0.785** | **0.149** | **2.645** | **52.33** | **0.229** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB213 | GPEC-SB213 | GPEC-SB213 | GPEC-SB214 | GPEC-SB214 | GPEC-SB214 |
| | | | Sample Name | GPEC-SB213 (1-2) | GPEC-SB213 (14-15) | GPEC-SB213 (85-86) | GPEC-SB214 (5-6) | GPEC-SB214 (7-8) | GPEC-SB214 (30-31) |
| | | | Start Depth | 1 | 14 | 85 | 5 | 7 | 30 |
| | | | End Depth | 2 | 15 | 86 | 6 | 8 | 31 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/18/2012 | 7/2/2012 | 7/2/2012 | 7/2/2012 | 7/14/2012 | 7/14/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.025 U | 0.023 U | 0.022 U | 0.022 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.025 U | 0.023 U | 0.022 U | 0.022 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.025 U | 0.023 U | 0.022 U | 0.022 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.021 UJ | 0.025 U | 0.023 UJ | 0.022 U | 0.022 UJ | 0.024 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.053 U | NA | NA | 0.054 U | 0.056 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | **0.00673** | NA | NA | 0.00434 U | **0.00706 J** | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | **0.026** | NA | NA | 0.00434 U | **0.016** | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00423 U | NA | NA | 0.00434 U | 0.00447 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.053 U | NA | NA | 0.054 U | 0.056 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | 0.052 U | NA | NA | 0.054 U | 1.06 U | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9930** | **9580** | **4840** | **7230** | **5040** | **12300** |
| Antimony | 7440-36-0 | NE | NE | 1.16 U | 1.41 U | 1.3 U | 1.12 U | **63.9** | 1.31 U |
| Arsenic | 7440-38-2 | 16 | 16 | **44.7** | **1.92** | **2.11** | **1.81** | **63.6** | **5.17** |
| Barium | 7440-39-3 | 10000 | 820 | **114** | **39.2** | **24.8** | **37.5** | **94.7** | **31.8** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.547 J** | **0.515 J** | **0.318 J** | **0.365 J** | **67** | **0.635 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.823** | 0.706 U | 0.652 U | **0.284 J** | **62.9** | 0.654 U |
| Calcium | 7440-70-2 | NE | NE | **5470** | **1200** | **7760** | **1460** | **11100** | **2280** |
| Chromium | 7440-47-3 | NE | NE | **37.8** | **22.5** | **9.86** | **14.1** | **72.5** | **24.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.07 UJ | 1.27 UJ | 1.21 UJ | 1.11 UJ | 1.14 UJ | 1.23 UJ |
| Cobalt | 7440-48-4 | NE | NE | **10.2** | **5.33** | **3.79** | **4.33** | **65.6** | **7.12** |
| Copper | 7440-50-8 | 10000 | 1720 | **326** | **32.9** | **6.54** | **33.4** | **70.3** | **10.2** |
| Iron | 7439-89-6 | NE | NE | **19600** | **9860** | **10000** | **9130** | **12100** | **22000** |
| Lead | 7439-92-1 | 3900 | 450 | **141** | **16.6** | **3.22** | **14.5** | **68.7** | **10.5** |
| Magnesium | 7439-95-4 | NE | NE | **5200** | **2470** | **5140** | **1940** | **6250** | **5030** |
| Manganese | 7439-96-5 | 10000 | 2000 | **282 J** | **71** | **191** | **77.5** | **275 J** | **250 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.541** | **0.12** | 0.016 U | **0.098** | **0.598** | **0.044** |
| Nickel | 7440-02-0 | 10000 | 130 | **66.9** | **13** | **9.01** | **14.3** | **73.1** | **18.2** |
| Potassium | 7440-09-7 | NE | NE | **2500** | **1460** | **1010** | **1000** | **2220** | **2860** |
| Selenium | 7782-49-2 | 6800 | 4 | **8.83** | 2.82 U | 2.61 U | 2.24 U | **63.6** | 2.62 U |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.23** | 0.706 U | 0.652 U | 0.559 U | **62.6** | 0.654 U |
| Sodium | 7440-23-5 | NE | NE | **1230** | **237** | **289** | **220** | **1550** | **2290** |
| Thallium | 7440-28-0 | NE | NE | **0.451 J** | 0.706 U | 0.652 U | 0.559 U | **67.2** | 0.654 U |
| Vanadium | 7440-62-2 | NE | NE | **30.1** | **35** | **13.7** | **49.9** | **77.2** | **30.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **229** | **47.1** | **17.6** | **68** | **81.2** | **50.7** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.07 U | 1.27 U | 1.21 U | 1.11 U | 1.14 U | 1.23 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **56000** | **1400** | **1370** | **3170** | **55200** | **2780** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB214 | GPEC-SB215 | GPEC-SB215 | GPEC-SB215 | GPEC-SB216 | GPEC-SB216 | GPEC-SB216 |
| | | | Sample Name | GPEC-SB214 (86-87) | GPEC-SB215 (3-4) | GPEC-SB215 (36-37) | GPEC-SB215 (86-87) | GPEC-SB216 (4-5) | GPEC-SB216 (7-8) | GPEC-SB216 (86-87) |
| | | | Start Depth | 86 | 3 | 36 | 86 | 4 | 7 | 86 |
| | | | End Depth | 87 | 4 | 37 | 87 | 5 | 8 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/15/2012 | 7/2/2012 | 7/16/2012 | 7/16/2012 | 7/2/2012 | 7/15/2012 | 7/18/2012 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00566 U | **0.057 J** | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00566 U | **0.102 J** | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00566 U | 0.134 U | **0.0038 J** | 0.00603 U | 0.0061 U | **1.64 J** | 0.00554 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | **0.113 J** | 0.014 U | 0.012 U | 0.012 U | 4.82 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.272** | 0.0038 | ND | ND | **1.64** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.028 U | 0.134 U | 0.036 U | 0.03 U | 0.031 U | 2.41 U | 0.028 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Bromoform | 75-25-2 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.012 U | 2.41 U | 0.00554 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.012 U | 2.41 U | 0.00554 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.134 U | 0.014 U | 0.012 U | 0.0061 U | 2.41 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00566 U | 0.134 U | **0.014** | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.011 U | 0.134 U | 0.014 U | 0.012 U | 0.0061 U | 2.41 U | 0.011 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.012 U | 2.41 U | 0.00554 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.012 U | 2.41 U | 0.00554 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.012 U | 2.41 U | 0.00554 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 U | 0.267 U | 0.014 U | 0.012 U | 0.012 U | 4.82 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00566 U | 0.134 U | 0.00722 U | 0.00603 U | 0.0061 U | 2.41 U | 0.00554 U |
| Total VOCs | TVOC | NE | NE | ND | **0.272** | **0.0178** | ND | ND | **1.64** | ND |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | **0.302** | **0.971** | 0.04 U | **0.037 J** | **111** | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.038 U | **1.36** | **0.208** | 0.04 U | **0.368** | **11.2** | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.018 J** | **1.54** | **1.3** | 0.04 U | **0.28** | **51.8** | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.038 U | **3.1** | **0.455** | 0.04 U | **0.384** | **5.6** | 0.036 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.038 U | **5.46** | **2.5** | 0.04 U | **1.05** | **48.4** | 0.036 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | **0.731** | **0.654** | 0.04 U | **0.109** | **76.8** | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | **0.941** | **1.15** | 0.04 U | **0.065** | **206** | 0.036 U |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB214 | GPEC-SB215 | GPEC-SB215 | GPEC-SB215 | GPEC-SB216 | GPEC-SB216 | GPEC-SB216 | GPEC-SB216 |
| | | | Sample Name | GPEC-SB214 (86-87) | GPEC-SB215 (3-4) | GPEC-SB215 (36-37) | GPEC-SB215 (86-87) | GPEC-SB216 (4-5) | GPEC-SB216 (7-8) | GPEC-SB216 (86-87) | |
| | | | Start Depth | 86 | 3 | 36 | 86 | 4 | 7 | 86 | |
| | | | End Depth | 87 | 4 | 37 | 87 | 5 | 8 | 87 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/15/2012 | 7/2/2012 | 7/16/2012 | 7/16/2012 | 7/2/2012 | 7/15/2012 | 7/18/2012 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | **1.93** | **1.23** | 0.04 U | **0.111** | **314** | 0.036 U | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.038 U | **3.83** | **2.75** | 0.04 U | **0.54** | **174** | **0.019 J** | |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.038 U | **6.5** | **2.51** | 0.04 U | **1.73** | **67.5** | 0.036 U | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.038 U | **3.66** | **1.35** | 0.04 U | **0.953** | **26.4** | 0.036 U | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.038 U | **5.11** | **1.13** | 0.04 U | **1.24** | **24** | 0.036 U | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.038 U | **3.2** | **0.745** | 0.04 U | **0.711** | **10.8** | 0.036 U | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.038 U | **3.85** | **0.49** | 0.04 U | **0.674** | **11** | 0.036 U | |
| Chrysene | 218-01-9 | 110 | 1 | 0.038 U | **4.53** | **1.49** | 0.04 U | **1.03** | **25.6** | 0.036 U | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | **1.01** | **0.215** | 0.04 U | **0.161** | **2.27 J** | 0.036 U | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.038 U | **2.64** | **0.306** | 0.04 U | **0.365** | **5.83** | 0.036 U | |
| Total PAHs | TPAH | NE | NE | **0.018** | **49.694** | **19.454** | ND | **9.808** | **1172.2** | **0.019** | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA | |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | **0.258** | 0.048 U | 0.04 U | **0.031 J** | **1.73 J** | 0.036 U | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | **0.3** | **0.174** | 0.04 U | 0.04 U | **4.19** | 0.036 U | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | R | 0.048 U | 0.04 U | R | 3.21 U | 0.036 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | R | 0.048 U | 0.04 U | R | 3.21 U | 0.036 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.176 U | 0.048 U | 0.04 U | 0.04 U | 3.21 U | 0.036 U | |
| Total SVOCs | TSVOC | NE | NE | **0.018** | **50.252** | **19.628** | ND | **9.839** | **1178.12** | **0.019** | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB214 | GPEC-SB215 | GPEC-SB215 | GPEC-SB215 | GPEC-SB216 | GPEC-SB216 | GPEC-SB216 |
| | | | Sample Name | GPEC-SB214 (86-87) | GPEC-SB215 (3-4) | GPEC-SB215 (36-37) | GPEC-SB215 (86-87) | GPEC-SB216 (4-5) | GPEC-SB216 (7-8) | GPEC-SB216 (86-87) |
| | | | Start Depth | 86 | 3 | 36 | 86 | 4 | 7 | 86 |
| | | | End Depth | 87 | 4 | 37 | 87 | 5 | 8 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/15/2012 | 7/2/2012 | 7/16/2012 | 7/16/2012 | 7/2/2012 | 7/15/2012 | 7/18/2012 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.027 U | 0.029 U | 0.024 U | 0.024 U | 0.023 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.027 U | 0.029 U | 0.024 U | 0.024 U | 0.023 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.027 U | 0.029 U | 0.024 U | 0.024 U | 0.023 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.022 UJ | 0.027 U | 0.029 UJ | 0.024 UJ | 0.024 UJ | 0.023 UJ | 0.021 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.067 U | NA | NA | 0.06 U | 0.058 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00532 U | NA | NA | 0.0048 U | 0.00467 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.067 U | NA | NA | 0.06 U | 0.058 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | 0.061 U | NA | NA | 0.055 U | 0.056 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **11200** | **5250** | **10500** | **3260** | **7520** | **12200** | **3350** |
| Antimony | 7440-36-0 | NE | NE | 1.22 U | 1.48 U | 1.54 U | 1.21 U | 1.33 U | 1.33 U | 1.22 U |
| Arsenic | 7440-38-2 | 16 | 16 | **8.47** | **13.1** | **7.37** | **0.792** | **5.11** | **23.3** | **0.772** |
| Barium | 7440-39-3 | 10000 | 820 | **63** | **89.6** | **196** | **21.4** | **71.4** | **98.4** | **26.2** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.442 J** | **0.483 J** | **1.06** | 0.605 U | **0.425 J** | **0.563 J** | 0.609 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.609 U | **1.03** | **0.873** | 0.605 U | **0.263 J** | **0.455 J** | 0.609 U |
| Calcium | 7440-70-2 | NE | NE | **7260** | **5180** | **6950** | **6520** | **2660** | **5800** | **9200** |
| Chromium | 7440-47-3 | NE | NE | **23** | **12.2** | **26.2** | **6.47** | **13.3** | **32.2** | **5.98** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.13 UJ | 1.34 UJ | 1.44 UJ | 1.21 UJ | 1.22 UJ | 1.2 UJ | 1.11 UJ |
| Cobalt | 7440-48-4 | NE | NE | **8.92** | **5.66** | **11.6** | **2.81** | **5.03** | **10.3** | **2.78** |
| Copper | 7440-50-8 | 10000 | 1720 | **68.3** | **270** | **210** | **6.62** | **85.5** | **252** | **6.68** |
| Iron | 7439-89-6 | NE | NE | **20200** | **10600** | **22700** | **7000** | **11900** | **17800** | **8660** |
| Lead | 7439-92-1 | 3900 | 450 | **23.6** | **82.7** | **214** | **2.15** | **115** | **90.1** | **2.12** |
| Magnesium | 7439-95-4 | NE | NE | **4500** | **3290** | **6150** | **3420** | **2030** | **5080** | **4260** |
| Manganese | 7439-96-5 | 10000 | 2000 | **218 J** | **88.8** | **372 J** | **139 J** | **180** | **243 J** | **196 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.015 U | **1.65 J** | **0.552** | 0.015 U | **0.414** | **0.156** | 0.014 U |
| Nickel | 7440-02-0 | 10000 | 130 | **21** | **19** | **33.1** | **7.6** | **13.4** | **49.8** | **6.32** |
| Potassium | 7440-09-7 | NE | NE | **1910** | **826** | **2380** | **605** | **931** | **2370** | **648** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.44 U | 2.95 U | 3.08 U | 2.42 U | 2.66 U | **5.06** | 2.43 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.609 U | **0.381 J** | **0.341 J** | 0.605 U | 0.666 U | **0.721** | 0.609 U |
| Sodium | 7440-23-5 | NE | NE | **2940** | **260** | **668** | **166** | **208** | **2070** | **194** |
| Thallium | 7440-28-0 | NE | NE | 0.609 U | **0.301 J** | **0.246 J** | 0.605 U | 0.666 U | **0.296 J** | 0.609 U |
| Vanadium | 7440-62-2 | NE | NE | **41.1** | **27** | **33.9** | **9.1** | **17.7** | **29.2** | **10.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **58.5** | **148** | **276** | **13** | **93.9** | **141** | **13.3** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.13 U | 1.34 U | 1.44 U | 1.21 U | 1.22 U | 1.2 U | 1.11 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **3650** | **162000** | **19200** | **847 J** | **19100** | **16200** | **2630** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-TP201 | GPEC-TP202 | GPEC-TP203 | GPEC-TP203 | GPEC-TP204 | GPEC-TP204 | GPEC-TP205 | |
| | | | Sample Name | GPEC-TP201 (5-5.5) | GPEC-TP202B (5-5.5) | GPEC-TP203B (4.5-5) | GPEC-TP203 (5-5.5) | GPEC-TP204 (3-3.5) | GPEC-XX080912 | GPEC-TP205 (7.5-8) | |
| | | | Start Depth | 5 | 5 | 4.5 | 5 | 3 | 3 | 7.5 | |
| | | | End Depth | 5.5 | 5.5 | 5 | 5.5 | 3.5 | 3.5 | 8 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 8/7/2012 | 8/8/2012 | 8/9/2012 | 8/8/2012 | 8/9/2012 | 8/9/2012 | 8/13/2012 | |
| | | | Parent Sample Code | | | | | | GPEC-TP-204 (3-3.5) | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00595 U | **0.122 J** | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | **0.352 J** | 0.013 U | 0.466 U | 0.011 U | 0.01 U | 0.013 U | |
| Total BTEX | TBTEX | NE | NE | ND | **0.474** | ND | ND | ND | ND | ND | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.00595 U | 0.462 U | 0.00632 U | 0.466 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Bromoform | 75-25-2 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Bromomethane | 74-83-9 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Chloromethane | 74-87-3 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.462 U | 0.013 U | 0.466 U | 0.011 U | 0.01 U | 0.013 U | |
| Styrene | 100-42-5 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA | |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00595 U | 0.231 U | 0.00632 U | 0.233 U | 0.00529 U | 0.00524 U | 0.00631 U | |
| Total VOCs | TVOC | NE | NE | ND | **0.474** | ND | ND | ND | ND | ND | |
| **PAHs (mg/kg)** | | | ***NE*** | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.04 U | **6.27** | **0.106** | **1.18** | 0.035 U | 0.035 U | **0.278** | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.047** | **0.894** | **0.305** | **0.612** | **0.094** | **0.073** | **1** | |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.133** | **3.26** | **0.411** | **0.507** | **0.075** | **0.062** | **0.821** | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.242** | **0.381** | **1.12** | 0.192 U | **0.216** | **0.144** | **3.39** | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.817** | **3.22** | **2.3** | **0.244** | **0.376** | **0.276** | **4.17** | |
| Fluorene | 86-73-7 | 1000 | 386 | **0.024 J** | **4.22** | **0.169** | **1.63** | **0.028 J** | **0.019 J** | **0.338** | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.04 U | **14.8** | **0.251** | **21** | **0.033 J** | 0.035 U | **1.33** | |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-TP201 | GPEC-TP202 | GPEC-TP203 | GPEC-TP203 | GPEC-TP204 | GPEC-TP204 | GPEC-TP205 |
| | | | Sample Name | GPEC-TP201 (5-5.5) | GPEC-TP202B (5-5.5) | GPEC-TP203B (4.5-5) | GPEC-TP203 (5-5.5) | GPEC-TP204 (3-3.5) | GPEC-XX080912 | GPEC-TP205 (7.5-8) |
| | | | Start Depth | 5 | 5 | 4.5 | 5 | 3 | 3 | 7.5 |
| | | | End Depth | 5.5 | 5.5 | 5 | 5.5 | 3.5 | 3.5 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/7/2012 | 8/8/2012 | 8/9/2012 | 8/8/2012 | 8/9/2012 | 8/9/2012 | 8/13/2012 |
| | | | Parent Sample Code | | | | | | GPEC-TP-204 (3-3.5) | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.063** | **4.67** | **0.536** | **6.78** | **0.068** | **0.044** | **2.13** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.337** | **12.7** | **1.29** | **4.03** | **0.193** | **0.146** | **2.47** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.778** | **6.33** | **2.58** | **0.472** | **0.723** | **0.466** | **4.57** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.471** | **1.83** | **1.41** | 0.192 U | **0.33** | **0.238** | **3.38** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.495** | **1.72** | **1.72** | 0.192 U | **0.357** | **0.267** | **4.23** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.403** | **0.846** | **1.27** | 0.192 U | **0.226** | **0.156** | **3.16** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.37** | **0.974** | **1.25** | 0.192 U | **0.244** | **0.217** | **3.02** |
| Chrysene | 218-01-9 | 110 | 1 | **0.502** | **1.66** | **1.54** | 0.192 U | **0.354** | **0.269** | **3.43** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.091** | 0.19 U | **0.321** | 0.192 U | **0.083** | **0.087** | **0.997** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.237** | **0.251** | **0.911** | 0.192 U | **0.185** | **0.116** | **2.49** |
| Total PAHs | TPAH | NE | NE | **5.01** | **64.026** | **17.49** | **36.455** | **3.585** | **2.58** | **41.204** |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | **0.052** | 0.035 U | **0.25** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | 0.19 U | **0.134** | 0.192 U | 0.035 U | 0.035 U | **0.193** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | **1.26** | **0.111** | 0.192 U | 0.035 U | 0.035 U | **0.32** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.19 U | 0.042 U | 0.192 U | 0.035 U | 0.035 U | 0.167 U |
| Total SVOCs | TSVOC | NE | NE | **5.01** | **65.286** | **17.735** | **36.455** | **3.637** | **2.58** | **41.967** |

**Table 10. Subsurface Soil Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-TP201 | GPEC-TP202 | GPEC-TP203 | GPEC-TP203 | GPEC-TP204 | GPEC-TP204 | GPEC-TP205 |
| | | | Sample Name | GPEC-TP201 (5-5.5) | GPEC-TP202B (5-5.5) | GPEC-TP203B (4.5-5) | GPEC-TP203 (5-5.5) | GPEC-TP204 (3-3.5) | GPEC-XX080912 | GPEC-TP205 (7.5-8) |
| | | | Start Depth | 5 | 5 | 4.5 | 5 | 3 | 3 | 7.5 |
| | | | End Depth | 5.5 | 5.5 | 5 | 5.5 | 3.5 | 3.5 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/7/2012 | 8/8/2012 | 8/9/2012 | 8/8/2012 | 8/9/2012 | 8/9/2012 | 8/13/2012 |
| | | | Parent Sample Code | | | | | | GPEC-TP-204 (3-3.5) | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | **0.199** |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.021 U | 0.02 U | 0.024 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | **0.199** |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| Silvex | 93-72-1 | 3.8 | NE | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8440** | **7840** | **7490** | **8500** | **910** | **179** | **5860** |
| Antimony | 7440-36-0 | NE | NE | 1.19 U | 1.26 U | **1.26 J** | 1.25 U | 1.13 U | 1.1 U | 1.38 U |
| Arsenic | 7440-38-2 | 16 | 16 | **2.75** | **2.92** | **7.98** | **3.32** | **0.982** | 0.551 U | **13** |
| Barium | 7440-39-3 | 10000 | 820 | **70.8** | **71.1** | **229** | **50.4** | **9.47 J** | 11 U | **75.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.63** | **0.539** | **0.602** | **0.642** | 0.395 U | 0.386 U | **0.599** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.336 J** | **0.454 J** | **0.912** | **0.192 J** | 0.564 U | 0.551 U | **0.467 J** |
| Calcium | 7440-70-2 | NE | NE | **1740** | **3650** | **4890** | **6110** | **296** | **41.3 J** | **22700** |
| Chromium | 7440-47-3 | NE | NE | **17.4** | **17.7** | **22** | **18.6** | **3.52** | **0.715 J** | **93.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 1.15 U | 1.26 U | 1.16 U | 1.06 U | 1.05 U | 1.26 U |
| Cobalt | 7440-48-4 | NE | NE | **6.74** | **5.76** | **6.56** | **6.7** | **0.614 J** | 2.21 U | **8.04** |
| Copper | 7440-50-8 | 10000 | 1720 | **42.8** | **67.1** | **276** | **30.8** | **24.5** | **4.99** | **154** |
| Iron | 7439-89-6 | NE | NE | **12300** | **11700** | **13300** | **12600** | **1630** | **387** | **14400** |
| Lead | 7439-92-1 | 3900 | 450 | **59.7** | **60.3** | **280** | **27.4** | **23.6** | **4.98** | **180** |
| Magnesium | 7439-95-4 | NE | NE | **3100** | **3020** | **2670** | **5610** | **335** | **63.8** | **12200** |
| Manganese | 7439-96-5 | 10000 | 2000 | **143** | **172** | **208** | **231** | **25.7** | **6.65** | **477** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.245** | **0.244** | **1.34** | **0.106** | **0.194** | **0.239** | **0.746** |
| Nickel | 7440-02-0 | 10000 | 130 | **20.9** | **19.8** | **21.8** | **21.8** | **1.62** | 1.1 U | **29.7** |
| Potassium | 7440-09-7 | NE | NE | **1410** | **1380** | **1200** | **1720** | **150** | **29.9 J** | **1270** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.38 U | 2.52 U | 2.72 U | 2.5 U | 2.26 U | 2.21 U | 2.76 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.595 U | **0.192 J** | **0.825** | 0.625 U | 0.564 U | 0.551 U | **0.293 J** |
| Sodium | 7440-23-5 | NE | NE | **358** | **109 J** | **284** | **165** | **51.2 J** | 110 U | **1300** |
| Thallium | 7440-28-0 | NE | NE | 0.595 U | 0.63 U | **0.2 J** | **0.208 J** | 0.564 U | 0.551 U | 0.691 U |
| Vanadium | 7440-62-2 | NE | NE | **25** | **22.7** | **27** | **23.9** | **3.8** | **0.684 J** | **32.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **80.7** | **123** | **277** | **56.6** | **21** | **2.46** | **177** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.19 U | 1.15 U | 1.26 U | 1.16 U | 1.06 U | 1.05 U | 1.26 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **8790** | **14300** | **38200** | **24200** | **8130** | **5810** | **88200** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-GT01 (MW) | GPEC-GT01 (MW) | GPEC-GT01 (MW) | GPEC-GT02 (CPT) | GPEC-GT03 (MW) | GPEC-GT03 (MW) | GPEC-GT03 (MW) | GPEC-GT04S (MW) | GPEC-GT04D (MW) |
| Sample Name | | | | GPEC-GT-1 (8) | GPEC GT-1 (37-39) | GPEC GT-1 (60-62) | GPEC-GT-2 (5-6) | GPEC-GT-3 (3-4) | GPEC-GT-3 (8-10) | GPEC-GT-3 (50-52) | GPEC-GT-4S (8-9) | GPEC-GT-4D (3-4) |
| Start Depth | | | | 8 | 37 | 60 | 5 | 3 | 8 | 50 | 8 | 3 |
| End Depth | | | | 8 | 39 | 62 | 6 | 4 | 10 | 52 | 9 | 4 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 8/10/2009 | 8/25/2009 | 8/24/2009 | 8/4/2009 | 8/4/2009 | 8/12/2009 | 8/13/2009 | 8/5/2009 | 8/5/2009 |
| Parent Sample Code | | | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | **0.17** | **0.0069** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | **17 J** | 0.0071 U | 0.032 U | 0.0065 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | **75** | 0.0071 U | 0.032 U | 0.0065 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | **950** | **0.0033 J** | **0.0082 J** | 0.0065 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | **1042** | **0.0033** | **0.1782** | **0.0069** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 UJ | **0.024** | 0.031 U | 0.027 U | 0.027 UJ | R | 0.028 UJ | 140 UJ | 0.026 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Bromoform | 75-25-2 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0061 U | 0.006 UJ | 0.0077 UJ | 0.0067 U | 0.0068 UJ | 28 UJ | 0.0071 U | 0.032 U | 0.0065 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.015 U | 0.013 U | 0.014 UJ | 28 U | 0.014 UJ | 0.064 U | 0.013 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 UJ | 0.032 U | **0.0012 J** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 UJ | 0.032 U | 0.0065 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.012 U | 0.015 U | 0.013 U | 0.014 UJ | 28 U | 0.014 UJ | 0.064 U | 0.013 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 UJ | 0.032 U | 0.0065 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.024 UJ | 0.024 U | 0.031 U | 0.027 U | 0.027 UJ | 28 U | 0.028 U | 0.13 U | 0.026 U |
| Styrene | 100-42-5 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | **520** | **0.0011 J** | 0.032 U | 0.0065 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0061 U | 0.006 U | 0.0077 U | 0.0067 U | 0.0068 UJ | 28 U | 0.0071 U | 0.032 U | 0.0065 U |
| Total VOCs | TVOC | NE | NE | ND | **0.024** | ND | ND | ND | **1562** | **0.0044** | **0.1782** | **0.0081** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.68** | 0.31 U | 0.41 U | 0.35 U | **0.06 J** | 61 U | 0.38 U | **11** | **0.7** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.21 J** | 0.31 U | 0.41 U | 0.35 U | 0.37 U | **7.7 J** | 0.38 U | **0.76 J** | **0.32 J** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.8** | 0.31 U | 0.41 U | **0.031 J** | **0.16 J** | 61 U | 0.38 U | **4.8** | **1.1** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.7** | 0.31 U | 0.41 U | **0.13 J** | **0.48** | 61 U | 0.38 U | **5.3** | **0.83** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **4** | 0.31 U | 0.41 U | **0.19 J** | **1.1** | 61 U | 0.38 U | **15** | **3.3** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.43** | 0.31 U | 0.41 U | 0.35 U | **0.069 J** | **4.2 J** | 0.38 U | **8.3** | **0.75** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.078 J** | 0.31 U | 0.41 U | 0.35 U | **0.045 J** | **91** | **0.031 J** | **1.2 J** | **0.44** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.25 J** | 0.31 U | 0.41 U | 0.35 U | 0.37 U | **790** | 0.38 U | **8.6** | **1.5** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **3** | 0.31 U | 0.41 U | **0.12 J** | **0.7** | **9.9 J** | 0.38 U | **9.4** | **4.6** |
| Pyrene | 129-00-0 | 1000 | 1000 | **5.2** | 0.31 U | 0.41 U | **0.17 J** | **0.87** | 61 U | 0.38 U | **20** | **2.3** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.4** | 0.31 U | 0.41 U | **0.11 J** | **0.51** | 61 U | 0.38 U | **7.4** | **1.2** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **2.2** | 0.31 U | 0.41 U | **0.12 J** | **0.42** | 61 U | 0.38 U | **5.7** | **1.2** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **2.6** | 0.31 U | 0.41 U | **0.14 J** | **0.54** | 61 U | 0.38 U | **6.9** | **1.4** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.93** | 0.31 U | 0.41 U | **0.058 J** | **0.19 J** | 61 U | 0.38 U | **2.3** | **0.47** |
| Chrysene | 218-01-9 | 110 | 1 | **2.4** | 0.31 U | 0.41 U | **0.12 J** | **0.5** | 61 U | 0.38 U | **8.6** | **1.3** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.68** | 0.31 U | 0.41 U | 0.35 U | **0.11 J** | 61 U | 0.38 U | **1.2 J** | **0.23 J** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **2.8** | 0.31 U | 0.41 U | **0.11 J** | **0.43** | 61 U | 0.38 U | **5** | **0.83** |
| Total PAHs | TPAH | NE | NE | **31.358** | ND | ND | **1.299** | **6.184** | **902.8** | **0.031** | **121.46** | **22.47** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-GT01 (MW)** | **GPEC-GT01 (MW)** | **GPEC-GT01 (MW)** | **GPEC-GT02 (CPT)** | **GPEC-GT03 (MW)** | **GPEC-GT03 (MW)** | **GPEC-GT03 (MW)** | **GPEC-GT04S (MW)** | **GPEC-GT04D (MW)** |
| **Sample Name** | | | | **GPEC-GT-1 (8)** | **GPEC GT-1 (37-39)** | **GPEC GT-1 (60-62)** | **GPEC-GT-2 (5-6)** | **GPEC-GT-3 (3-4)** | **GPEC-GT-3 (8-10)** | **GPEC-GT-3 (50-52)** | **GPEC-GT-4S (8-9)** | **GPEC-GT-4D (3-4)** |
| **Start Depth** | | | | **8** | **37** | **60** | **5** | **3** | **8** | **50** | **8** | **3** |
| **End Depth** | | | | **8** | **39** | **62** | **6** | **4** | **10** | **52** | **9** | **4** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **8/10/2009** | **8/25/2009** | **8/24/2009** | **8/4/2009** | **8/4/2009** | **8/12/2009** | **8/13/2009** | **8/5/2009** | **8/5/2009** |
| Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.52** | **0.13 J** | **0.052 J** | **0.063 J** | **0.21 J** | 61 U | 0.38 U | 1.4 U | **0.17 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Carbazole | 86-74-8 | NE | NE | **0.36** | 0.31 U | 0.41 U | 0.35 U | **0.063 J** | 61 U | 0.38 U | **0.65 J** | **0.41** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.32 U | 0.31 U | 0.41 U | 0.35 UJ | 0.37 UJ | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.23 J** | 0.31 U | 0.41 U | 0.35 U | **0.043 J** | 61 U | 0.38 U | **2** | **0.61** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.8 U | 0.76 U | 1 U | 0.87 U | 0.91 U | 150 U | 0.93 U | 3.4 U | 0.86 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2 U | 1.9 UJ | 2.6 UJ | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2 U | 1.9 UJ | 2.6 UJ | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.8 U | 0.76 U | 1 U | 0.87 U | 0.91 U | 150 U | 0.93 U | 3.4 U | 0.86 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.039 J** | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 2 U | 1.9 U | 2.6 U | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 2 U | 1.9 U | 2.6 U | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2 U | 1.9 U | 2.6 U | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2 U | 1.9 UJ | 2.6 UJ | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 2 U | 1.9 U | 2.6 U | 2.2 U | 2.3 U | 380 U | 2.4 U | 8.6 U | 2.2 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.32 U | 0.31 U | 0.41 U | 0.35 U | 0.37 U | 61 U | 0.38 U | 1.4 U | 0.35 U |
| Total SVOCs | TSVOC | NE | NE | **32.507** | **0.13** | **0.052** | **1.362** | **6.5** | **902.8** | **0.031** | **124.11** | **23.66** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.02 U | 0.02 U | 0.026 U | 0.023 U | 0.023 U | 0.019 U | 0.024 U | 0.022 UJ | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-GT01 (MW)** | **GPEC-GT01 (MW)** | **GPEC-GT01 (MW)** | **GPEC-GT02 (CPT)** | **GPEC-GT03 (MW)** | **GPEC-GT03 (MW)** | **GPEC-GT03 (MW)** | **GPEC-GT04S (MW)** | **GPEC-GT04D (MW)** |
| **Sample Name** | | | | **GPEC-GT-1 (8)** | **GPEC GT-1 (37-39)** | **GPEC GT-1 (60-62)** | **GPEC-GT-2 (5-6)** | **GPEC-GT-3 (3-4)** | **GPEC-GT-3 (8-10)** | **GPEC-GT-3 (50-52)** | **GPEC-GT-4S (8-9)** | **GPEC-GT-4D (3-4)** |
| **Start Depth** | | | | **8** | **37** | **60** | **5** | **3** | **8** | **50** | **8** | **3** |
| **End Depth** | | | | **8** | **39** | **62** | **6** | **4** | **10** | **52** | **9** | **4** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **8/10/2009** | **8/25/2009** | **8/24/2009** | **8/4/2009** | **8/4/2009** | **8/12/2009** | **8/13/2009** | **8/5/2009** | **8/5/2009** |
| Parent Sample Code | | | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6740** | **4130** | **27500** | **7260** | **7940** | **5870** | **17800** | **5360** | **8210** |
| Antimony | 7440-36-0 | NE | NE | 4.9 UJ | 4.9 UJ | 6.1 UJ | 5.5 UJ | 5.5 UJ | 4.7 UJ | 5.7 UJ | 5.3 UJ | 5.3 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | **10.5** | 6.2 U | **4.9** | **3.2 J** | **172** | **34** | 7.2 U | **11.6** | **9.5** |
| Barium | 7440-39-3 | 10000 | 820 | **81.3 J** | **55.2 J** | **292 J** | **68.3 J** | **331 J** | **34.8 J** | **157 J** | **155 J** | **172 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.54 J** | **0.27 J** | **1.6 J** | **0.51 J** | **0.59 J** | **0.44 J** | **1.4 J** | **0.4 J** | **0.64 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.5 UJ | 1.5 U | 1.8 UJ | 1.7 U | 1.7 U | 2.2 UJ | 1.7 UJ | **0.51 J** | 1.6 U |
| Calcium | 7440-70-2 | NE | NE | **3680 J** | **6200 J** | **10300 J** | **4810 J** | **2840 J** | **766 J** | **12800 J** | **7140 J** | **5500 J** |
| Chromium | 7440-47-3 | NE | NE | **21.1 J** | 10.3 UJ | **65.6 J** | **18.3 J** | **63 J** | **13.6 J** | **44.8 J** | **18.1 J** | **25.4 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1 U | **1.6** | **1.9** | **0.82 J** | **1** | 0.92 U | 1.1 U | 1.1 U | **0.99** |
| Cobalt | 7440-48-4 | NE | NE | **7.7** | **4.2** | **19.9** | **7.1** | **6.7** | **5.2** | **14.6** | **7.9** | **8.3** |
| Copper | 7440-50-8 | 10000 | 1720 | **268 J** | **27.9 J** | **47.2 J** | **28.6 J** | **192 J** | **17.3 J** | **33.8 J** | **423 J** | **216 J** |
| Iron | 7439-89-6 | NE | NE | **21400 J** | **11500 J** | **44600 J** | **20900** | **19100** | **15900 J** | **33700 J** | **38900** | **22000** |
| Lead | 7439-92-1 | 3900 | 450 | **185 J** | **10.3 J** | **15 J** | **55 J** | **344 J** | **23.9 J** | **12.7 J** | **793 J** | **383 J** |
| Magnesium | 7439-95-4 | NE | NE | **2080** | **4470** | **18300** | **3010** | **3230** | **1470** | **14500** | **2150** | **2310** |
| Manganese | 7439-96-5 | 10000 | 2000 | **416** | **309** | **782** | **396** | **286** | **150** | **574** | **547** | **320** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.78** | **0.015 J** | **0.012 J** | **0.26** | **0.58** | **0.023** | **0.0076 J** | **0.54** | **0.64** |
| Nickel | 7440-02-0 | 10000 | 130 | **19.8 J** | **10.8 J** | **59.7 J** | **14.4 J** | **19.9 J** | **10.8 J** | **38.7 J** | **76.3 J** | **18.3 J** |
| Potassium | 7440-09-7 | NE | NE | **841 J** | **776 J** | **10600 J** | **760 J** | **954 J** | **665 J** | **5980 J** | **565 J** | **1020 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 11.2 U | 11.1 U | 13.8 U | 12.5 U | 12.5 U | 10.6 U | 12.9 UJ | 12 U | 12 U |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.23 J** | 1.5 U | 1.8 UJ | 1.7 U | **0.2 J** | 1.4 U | 1.7 UJ | **0.62 J** | **0.36 J** |
| Sodium | 7440-23-5 | NE | NE | **82.5** | 765 U | **2880** | **67.3 J** | **100** | 70.8 U | **2140** | **357** | **230** |
| Thallium | 7440-28-0 | NE | NE | 4.5 U | 4.5 U | 5.5 U | 5 U | 5 U | 4.2 U | 5.1 U | **1.6 J** | 4.8 U |
| Vanadium | 7440-62-2 | NE | NE | **27.3** | **14.3** | **73** | **25.5** | **31.1** | **19.9** | **50.1** | **23.6** | **30** |
| Zinc | 7440-66-6 | 10000 | 2480 | **620 J** | 34.3 UJ | **117 J** | **82.5 J** | **158 J** | **25.7 J** | **85 J** | **979 J** | **247 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.24 U | 0.232 U | 0.302 U | 0.26 U | 0.267 U | 0.226 U | 0.284 U | 0.253 U | 0.254 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **76.8** | **77.4** | **66.9** | **76.9** | **77.7** | **86.6** | **71.3** | **74.8** | **83.5** |
| Total Organic Carbon | TOC | NE | NE | **10300** | **5240** | **4220** | **7450** | **35700** | **4950** | **8070** | **36700** | **57100** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-GT04D (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT07 (MW) | GPEC-GT07 (MW) |
| Sample Name | | | | GPEC-GT4/MW-14D (70-72) | GPEC-GT-5 (7-8) | GPEC-GT-XX 080609 | GPEC-GT-5 (16-18) | GPEC-GT-5 (23-24) | GPEC-GT-5 (30-32) | GPEC-GT-5 (50-52) | GPEC-GT-7 (8-10) | GPEC-GT-7 (50-52) |
| Start Depth | | | | 70 | 7 | 7 | 16 | 23 | 30 | 50 | 8 | 50 |
| End Depth | | | | 72 | 8 | 8 | 18 | 24 | 32 | 52 | 10 | 52 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 8/7/2009 | 8/4/2009 | 8/6/2009 | 8/11/2009 | 8/11/2009 | 8/11/2009 | 8/11/2009 | 8/27/2009 | 8/27/2009 |
| Parent Sample Code | | | | | | GPEC-GT-5 (7-8) | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0057 U | **0.0047 J** | **0.0015 J** | **520** | NA | **0.025** | **0.0018 J** | 0.0057 U | 0.0067 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0057 U | **0.016 J** | **0.05 J** | **35** | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0057 U | **0.0091 J** | 0.027 U | **48** | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.0298** | **0.0515** | **603** | ND | **0.025** | **0.0018** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.023 U | 0.023 U | 0.023 U | R | NA | 0.023 U | 0.024 U | 0.023 U | 0.027 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Bromoform | 75-25-2 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 UJ | NA | 0.0057 U | 0.0061 U | 0.0057 UJ | 0.0067 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.011 U | 0.011 U | 24 U | NA | 0.011 U | 0.012 U | 0.011 U | 0.013 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | **0.006** | 0.0061 U | 0.0057 U | 0.0067 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.011 U | 0.011 U | 24 U | NA | 0.011 U | 0.012 U | 0.011 U | 0.013 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.023 U | 0.023 U | 0.023 U | 24 U | NA | 0.023 U | 0.024 U | 0.023 U | 0.027 U |
| Styrene | 100-42-5 | NE | NE | **0.00028 J** | 0.0057 U | **0.00051 J** | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | **0.0018 J** | 0.0067 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0057 U | 0.0057 U | 0.0057 U | 24 U | NA | 0.0057 U | 0.0061 U | 0.0057 U | 0.0067 U |
| Total VOCs | TVOC | NE | NE | **0.00028** | **0.0298** | **0.05201** | **603** | ND | **0.031** | **0.0018** | **0.0018** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.3 U | **3.4** | **3** | **1.7** | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.3 U | **1.3** | **1.3** | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.3 U | **2.4** | **2.2** | **0.31 J** | NA | 0.31 U | 0.33 U | **0.063 J** | 0.35 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.3 U | **1.9** | **2** | 1.3 U | NA | 0.31 U | 0.33 U | **0.099 J** | 0.35 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.3 U | **7.1** | **6.9** | **0.55 J** | NA | 0.31 U | 0.33 U | **0.48** | 0.35 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.3 U | **2.4** | **2.2** | **0.71 J** | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.3 U | **1.3** | **1.5** | **4.1** | NA | **0.011 J** | 0.33 U | **0.011 J** | 0.35 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.3 U | **4.3** | **5.2** | **20** | NA | **0.04 J** | 0.33 U | 0.31 U | 0.35 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.3 U | **7.9** | **7.4** | **1.3 J** | NA | 0.31 U | 0.33 U | **0.3 J** | 0.35 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.3 U | **6.5** | **6.3** | **0.41 J** | NA | 0.31 U | 0.33 U | **0.43** | 0.35 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.3 U | **2.8** | **2.7** | **0.24 J** | NA | 0.31 U | 0.33 U | **0.22 J** | 0.35 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.3 U | **2.2** | **2.3** | **0.17 J** | NA | 0.31 U | 0.33 U | **0.21 J** | 0.35 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.3 U | **2.5** | **2.7** | **0.22 J** | NA | 0.31 U | 0.33 U | **0.25 J** | 0.35 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.3 U | **0.95** | **0.98** | 1.3 U | NA | 0.31 U | 0.33 U | **0.11 J** | 0.35 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.3 U | **2.8** | **2.8** | **0.21 J** | NA | 0.31 U | 0.33 U | **0.25 J** | 0.35 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.3 U | **0.5 J** | **0.49 J** | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.3 U | **2** | **2.1** | **0.28 J** | NA | 0.31 U | 0.33 U | **0.1 J** | 0.35 U |
| Total PAHs | TPAH | NE | NE | ND | **52.25** | **52.07** | **30.2** | ND | **0.051** | ND | **2.523** | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-GT04D (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT05 (MW)** | **GPEC-GT07 (MW)** | **GPEC-GT07 (MW)** | **GPEC-GT07 (MW)** |
| **Sample Name** | | | | **GPEC-GT4/MW-14D (70-72)** | **GPEC-GT-5 (7-8)** | **GPEC-GT-XX 080609** | **GPEC-GT-5 (16-18)** | **GPEC-GT-5 (23-24)** | **GPEC-GT-5 (30-32)** | **GPEC-GT-5 (50-52)** | **GPEC-GT-7 (8-10)** | **GPEC-GT-7 (50-52)** | |
| **Start Depth** | | | | **70** | **7** | **7** | **16** | **23** | **30** | **50** | **8** | **50** | |
| **End Depth** | | | | **72** | **8** | **8** | **18** | **24** | **32** | **52** | **10** | **52** | |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | |
| **Sample Date** | | | | **8/7/2009** | **8/4/2009** | **8/6/2009** | **8/11/2009** | **8/11/2009** | **8/11/2009** | **8/11/2009** | **8/27/2009** | **8/27/2009** | |
| Parent Sample Code | | | | | | GPEC-GT-5 (7-8) | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.64** | **0.11 J** | **0.17 J** | **0.18 J** | NA | **0.14 J** | **0.095 J** | **0.52** | 0.35 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Carbazole | 86-74-8 | NE | NE | 0.3 U | **0.55 J** | **0.53 J** | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.3 U | **1.5** | **1.4** | **0.61 J** | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.74 U | 1.5 U | 1.5 U | 3.2 U | NA | 0.77 U | 0.82 U | 0.76 U | 0.86 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.3 U | 0.61 U | **0.11 J** | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 UJ | 2.2 UJ | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 UJ | 2.2 UJ | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.74 U | 1.5 U | 1.5 U | 3.2 U | NA | 0.77 U | 0.82 U | 0.76 U | 0.86 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 U | 2.2 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 U | 2.2 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 U | 2.2 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 UJ | 2.2 UJ | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.3 U | 0.61 U | 0.6 U | **0.47 J** | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.9 U | 3.8 U | 3.8 U | 8.1 U | NA | 1.9 U | 2.1 U | 1.9 U | 2.2 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.3 U | 0.61 U | 0.6 U | 1.3 U | NA | 0.31 U | 0.33 U | 0.31 U | 0.35 U | |
| Total SVOCs | TSVOC | NE | NE | **0.64** | **54.41** | **54.28** | **31.46** | ND | **0.191** | **0.095** | **3.043** | ND | |
| **PCBs (mg/kg)** | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.019 U | 0.019 U | 0.019 U | 0.02 U | NA | 0.019 U | 0.021 U | 0.019 U | 0.023 U | |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-GT04D (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT05 (MW) | GPEC-GT07 (MW) | GPEC-GT07 (MW) |
| Sample Name | | | | GPEC-GT4/MW-14D (70-72) | GPEC-GT-5 (7-8) | GPEC-GT-XX 080609 | GPEC-GT-5 (16-18) | GPEC-GT-5 (23-24) | GPEC-GT-5 (30-32) | GPEC-GT-5 (50-52) | GPEC-GT-7 (8-10) | GPEC-GT-7 (50-52) |
| Start Depth | | | | 70 | 7 | 7 | 16 | 23 | 30 | 50 | 8 | 50 |
| End Depth | | | | 72 | 8 | 8 | 18 | 24 | 32 | 52 | 10 | 52 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 8/7/2009 | 8/4/2009 | 8/6/2009 | 8/11/2009 | 8/11/2009 | 8/11/2009 | 8/11/2009 | 8/27/2009 | 8/27/2009 |
| Parent Sample Code | | | | | | GPEC-GT-5 (7-8) | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3020** | **5480** | **6220** | **5220** | NA | **4920** | **2440** | **7540** | **4430** |
| Antimony | 7440-36-0 | NE | NE | 4.5 UJ | 4.6 UJ | 4.6 UJ | 4.9 UJ | NA | 4.6 UJ | 4.8 UJ | 4.5 UJ | 5.4 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | 5.8 U | **5.7** | **5.4 J** | 6.3 U | NA | 5.9 U | 6.1 U | 5.7 U | 6.9 U |
| Barium | 7440-39-3 | 10000 | 820 | **32.2 J** | **70.9 J** | **94.9 J** | **10.3 J** | NA | **14.2 J** | **8.5 J** | **26.1 J** | **43.9 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.21 J** | **0.45 J** | **0.51 J** | **0.4 J** | NA | **0.38 J** | 1.5 U | **0.36 J** | **0.34 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.4 U | 1.4 U | 1.4 U | 1.5 U | NA | 1.4 U | 1.5 U | 1.4 U | 1.6 U |
| Calcium | 7440-70-2 | NE | NE | **8060 J** | **2120 J** | **2710 J** | **477 J** | NA | **2420 J** | **769 J** | 868 UJ | **13000 J** |
| Chromium | 7440-47-3 | NE | NE | **7 J** | **15 J** | **16.5 J** | **11 J** | NA | **13.3 J** | **5.4 J** | 13.1 UJ | 11.4 UJ |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1 U | **0.46 J** | **5 J** | 1.1 U | **3.1** | **2.4** | **1.2** | **2.4** | 1.1 U |
| Cobalt | 7440-48-4 | NE | NE | **3.6** | **5.8** | **6** | **2.8** | NA | **3.6** | **2.2** | **5.1** | **4.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **8.6 J** | **72.4 J** | **68.1 J** | **7.4 J** | NA | **17.2 J** | **5.2 J** | 9.3 UJ | 12.7 UJ |
| Iron | 7439-89-6 | NE | NE | **8380 J** | **16500** | **17000** | **8130 J** | NA | **7020 J** | **5090 J** | **11100 J** | **9950 J** |
| Lead | 7439-92-1 | 3900 | 450 | 4.1 UJ | **116 J** | **154 J** | 5.4 UJ | NA | 4.2 UJ | 4.4 UJ | **9.2 J** | **3 J** |
| Magnesium | 7439-95-4 | NE | NE | **5760** | **2090** | **2570** | **1710** | NA | **2380** | **1450** | **1770** | **7480** |
| Manganese | 7439-96-5 | 10000 | 2000 | **392** | **243** | **271** | **61.5** | NA | **78.7** | **48.3** | **241** | **275** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.057 U | **1.1** | **1.1** | 0.056 U | NA | 0.055 U | 0.061 U | **0.041** | 0.067 U |
| Nickel | 7440-02-0 | 10000 | 130 | **7.9 J** | **16.2 J** | **15.3 J** | **10 J** | NA | **8.5 J** | **5.6 J** | **9.1 J** | **10.9 J** |
| Potassium | 7440-09-7 | NE | NE | **755 J** | **748 J** | **796 J** | **469 J** | NA | **609 J** | **498 J** | **362 J** | **1530 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 10.3 U | 10.5 U | 10.4 U | 11.2 U | NA | 10.5 U | 10.9 U | 10.2 U | 12.4 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.4 U | **0.24 J** | **0.2 J** | 1.5 U | NA | 1.4 U | 1.5 U | 1.4 U | 1.6 U |
| Sodium | 7440-23-5 | NE | NE | **169** | **161** | **174** | 244 U | NA | **435** | 150 U | 72.4 U | 322 U |
| Thallium | 7440-28-0 | NE | NE | 4.1 U | 4.2 U | 4.2 U | 4.5 U | NA | 4.2 U | 4.4 U | 4.1 U | 4.9 U |
| Vanadium | 7440-62-2 | NE | NE | **10.8** | **21.1** | **22.9** | **12.6** | NA | **13.2** | **8** | **15.7** | **15** |
| Zinc | 7440-66-6 | 10000 | 2480 | **18.1 J** | **128 J** | **123 J** | **19.7 J** | NA | **19.6 J** | **13.7 J** | 22.9 UJ | 26 UJ |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.228 U | 0.221 U | 0.226 U | 0.239 U | NA | 0.227 U | 0.242 U | 0.228 U | 0.264 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **76.8** | **86.7** | **85.2** | **75.5** | **81.1** | **82.5** | **78.7** | **80.8** | **70** |
| Total Organic Carbon | TOC | NE | NE | **4600** | **37200** | **50000** | **1410** | NA | **297** | **201** | **1940** | **5790** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-SB101A | GPEC-SB101A | GPEC-SB101A | GPEC-SB101B/SB109 |
| | | | Sample Name | GPEC-GT-8 (7.5-9) | GPEC GT-8 (14-16) | GPEC GT-8 (45-47) | GPEC-GT-8 (55-57) | GPEC-SB-101A (4-5) | GPEC-SB-101A (75-77) | GPEC-SB-101A (111-112) | GPEC-SB-101B (4-5) |
| | | | Start Depth | 7.5 | 14 | 45 | 55 | 4 | 75 | 111 | 4 |
| | | | End Depth | 9 | 16 | 47 | 57 | 5 | 77 | 112 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/5/2009 | 8/25/2009 | 8/25/2009 | 8/26/2009 | 5/13/2010 | 6/16/2010 | 6/17/2010 | 5/14/2010 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **0.012 J** | **5.5** | **0.057** | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.01 UJ | **0.98** | **0.0059 J** | **0.00026 J** | 0.0043 U | 0.0056 U | 0.0058 U | 0.005 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.0084 J** | **0.14 J** | **0.0026 J** | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | 0.0057 U | NA | NA | 0.0067 U |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | 0.0057 U | NA | NA | 0.0067 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **0.0079 J** | 0.95 U | 0.0068 U | 0.0066 U | NA | 0.0056 U | 0.0058 U | NA |
| Total BTEX | TBTEX | NE | NE | **0.0283** | **6.62** | **0.0655** | **0.00026** | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.14 J** | 2.4 U | **0.029** | 0.042 U | 0.1 U | 0.022 U | 0.023 U | 0.12 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | 0.072 UJ | NA | NA | 0.083 UJ |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | 0.029 U | NA | NA | 0.033 U |
| Bromodichloromethane | 75-27-4 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Bromoform | 75-25-2 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.011 U | 0.0056 U | 0.0058 U | 0.013 U |
| Bromomethane | 74-83-9 | NE | NE | R | 0.95 U | 0.0068 UJ | 0.0066 UJ | R | 0.0056 U | 0.0058 U | R |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.042 J** | 0.95 U | 0.014 U | 0.013 U | 0.029 U | 0.011 U | 0.012 U | 0.033 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | R | NA | NA | R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.0077 J** | 0.95 U | 0.0068 U | 0.0066 U | 0.029 UJ | 0.0056 U | **0.0032 J** | 0.033 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Chloroethane | 75-00-3 | NE | 1.9 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0067 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0043 U | 0.0056 U | 0.0058 U | 0.005 U |
| Chloromethane | 74-87-3 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.014 U | 0.0056 U | 0.0058 U | 0.017 U |
| Dibromochloromethane | 124-48-1 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | 0.029 U | NA | NA | 0.033 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0043 U | 0.0056 U | 0.0058 U | 0.005 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0043 U | 0.0056 U | 0.0058 U | 0.005 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.01 U | 0.0056 U | 0.0058 U | 0.012 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | 0.011 U | NA | NA | 0.013 U |
| 2-Hexanone | 591-78-6 | NE | NE | R | 0.95 U | 0.014 U | 0.013 U | 0.029 U | 0.011 U | 0.012 U | 0.033 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | 0.0057 U | NA | NA | 0.0067 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.029 U | 0.0056 U | 0.0058 U | 0.033 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.041 UJ | 0.95 U | 0.027 U | 0.026 U | 0.029 U | 0.022 UJ | 0.023 UJ | 0.033 U |
| Styrene | 100-42-5 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0067 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | 0.057 U | NA | NA | 0.067 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | 0.014 U | NA | NA | 0.017 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0043 U | 0.0056 UJ | 0.0058 UJ | 0.005 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | R | 0.95 U | 0.0068 U | 0.0066 U | 0.0029 U | 0.0056 U | 0.0058 U | 0.0033 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | 0.014 U | NA | NA | 0.017 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | 0.029 U | NA | NA | 0.033 U |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | R | NA | NA | R |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.01 U | 0.95 U | 0.0068 U | 0.0066 U | 0.0057 U | 0.0056 U | 0.0058 U | 0.0067 U |
| Total VOCs | TVOC | NE | NE | **0.218** | **6.62** | **0.0945** | **0.00026** | ND | ND | **0.0032** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.52 J** | 5.1 U | 0.35 U | 0.36 U | **0.4** | 0.29 U | 0.3 U | **1.05** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.18 J** | 5.1 U | 0.35 U | 0.36 U | **0.241** | 0.29 U | 0.3 U | **0.627** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.73 J** | 5.1 U | 0.35 U | 0.36 U | **0.951** | 0.29 U | 0.3 U | **2.77** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.98 J** | 5.1 U | 0.35 U | 0.36 U | **2.25** | 0.29 U | 0.3 U | **4.53** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **2.4 J** | **0.67 J** | 0.35 U | 0.36 U | **7.32** | 0.29 U | 0.3 U | **15.7** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.5 J** | 5.1 U | 0.35 U | 0.36 U | **0.306** | 0.29 U | 0.3 U | **0.99** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.29 J** | 5.1 U | 0.35 U | 0.36 U | **0.0775 J** | 0.29 U | 0.3 U | **0.455** |
| Naphthalene | 91-20-3 | 1000 | 12 | **8.3 J** | 5.1 U | **0.029 J** | 0.36 U | **0.164 J** | 0.29 U | 0.3 U | **0.571** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **2.8 J** | 5.1 U | 0.35 U | 0.36 U | **4.46** | 0.29 U | 0.3 U | **14.5** |
| Pyrene | 129-00-0 | 1000 | 1000 | **1.7** | **0.51 J** | 0.35 U | 0.36 U | **6.77** | 0.29 U | 0.3 U | **16.6** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.3 J** | 5.1 U | 0.35 U | 0.36 U | **3.85** | 0.29 U | 0.3 U | **9.32** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.3 J** | **0.3 J** | 0.35 U | 0.36 U | **3.35** | 0.29 U | 0.3 U | **6.51** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.6 J** | **0.37 J** | 0.35 U | 0.36 U | **2.6** | 0.29 U | 0.3 U | **6.63** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.5 J** | 5.1 U | 0.35 U | 0.36 U | **3.31** | 0.29 U | 0.3 U | **4.66** |
| Chrysene | 218-01-9 | 110 | 1 | **1.2 J** | 5.1 U | 0.35 U | 0.36 U | **3.75** | 0.29 U | 0.3 U | **8.07** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.25 J** | 5.1 U | 0.35 U | 0.36 U | **0.736** | 0.29 U | 0.3 U | **1.64** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.17 J** | 5.1 U | 0.35 U | 0.36 U | **2.03** | 0.29 U | 0.3 U | **3.81** |
| Total PAHs | TPAH | NE | NE | **24.72** | **1.85** | **0.029** | ND | **42.5655** | ND | ND | **98.433** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-SB101A | GPEC-SB101A | GPEC-SB101A | GPEC-SB101B/SB109 |
| | | | Sample Name | GPEC-GT-8 (7.5-9) | GPEC GT-8 (14-16) | GPEC GT-8 (45-47) | GPEC-GT-8 (55-57) | GPEC-SB-101A (4-5) | GPEC-SB-101A (75-77) | GPEC-SB-101A (111-112) | GPEC-SB-101B (4-5) |
| | | | Start Depth | 7.5 | 14 | 45 | 55 | 4 | 75 | 111 | 4 |
| | | | End Depth | 9 | 16 | 47 | 57 | 5 | 77 | 112 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/5/2009 | 8/25/2009 | 8/25/2009 | 8/26/2009 | 5/13/2010 | 6/16/2010 | 6/17/2010 | 5/14/2010 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | 0.215 U | NA | NA | 0.232 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | 0.215 U | NA | NA | 0.232 U |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | R | NA | NA | R |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | R | NA | NA | R |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.55 U | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 UJ | 0.3 UJ | 0.232 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.55 U | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.22 J** | 5.1 U | **0.12 J** | 0.36 U | **0.043 J** | 0.29 U | 0.3 U | **0.079 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Carbazole | 86-74-8 | NE | NE | **0.39 J** | 5.1 U | 0.35 U | 0.36 U | **0.379** | 0.29 U | 0.3 U | **0.753** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.29 J** | 5.1 U | 0.35 U | 0.36 U | **0.176 J** | 0.29 U | 0.3 U | **0.413** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 1.4 UJ | 13 U | 0.86 U | 0.88 U | 0.215 U | 0.35 U | 0.37 U | 0.232 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 3.5 UJ | 32 UJ | 2.2 UJ | 2.2 UJ | 0.861 U | 1.8 U | 1.9 U | 0.929 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 3.5 UJ | 32 UJ | 2.2 UJ | 2.2 UJ | 0.861 UJ | 1.8 U | 1.9 U | 0.929 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 1.4 UJ | 13 U | 0.86 U | 0.88 U | 0.215 U | 0.71 U | 0.74 U | 0.232 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.55 UJ | **0.33 J** | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.39 J** | **3.3 J** | 0.35 U | 0.36 U | **0.0172 J** | 0.29 U | 0.3 U | 0.232 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 3.5 UJ | 32 U | 2.2 U | 2.2 U | 0.215 U | 0.71 U | 0.74 U | 0.232 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 3.5 UJ | 32 U | 2.2 U | 2.2 U | 0.215 U | 0.71 U | 0.74 U | 0.232 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 3.5 UJ | 32 UJ | 2.2 U | 2.2 U | 0.43 U | 1.8 U | 1.9 U | 0.464 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | 0.215 U | NA | NA | 0.232 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 3.5 UJ | 32 UJ | 2.2 UJ | 2.2 UJ | 0.861 UJ | 0.71 U | 0.74 U | 0.929 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.55 UJ | **57 J** | **0.26 J** | **0.14 J** | 0.215 U | 0.29 U | 0.3 U | **0.0186 J** |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | 0.215 U | NA | NA | 0.232 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.55 UJ | 5.1 U | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 3.5 UJ | 32 UJ | 2.2 U | 2.2 U | 0.215 U | 1.8 U | 1.9 U | 0.232 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.55 UJ | 5.1 UJ | 0.35 U | 0.36 U | 0.215 U | 0.29 U | 0.3 U | 0.232 U |
| Total SVOCs | TSVOC | NE | NE | **26.01** | **62.48** | **0.409** | **0.14** | **43.1807** | ND | ND | **99.6966** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.035 J** | 0.032 U | 0.023 U | 0.022 U | 0.0403 U | 0.019 U | 0.02 U | 0.0464 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.245** | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| Location Name | | | | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-GT08 | GPEC-SB101A | GPEC-SB101A | GPEC-SB101A | GPEC-SB101B/SB109 |
| Sample Name | | | | GPEC-GT-8 (7.5-9) | GPEC GT-8 (14-16) | GPEC GT-8 (45-47) | GPEC-GT-8 (55-57) | GPEC-SB-101A (4-5) | GPEC-SB-101A (75-77) | GPEC-SB-101A (111-112) | GPEC-SB-101B (4-5) |
| Start Depth | | | | 7.5 | 14 | 45 | 55 | 4 | 75 | 111 | 4 |
| End Depth | | | | 9 | 16 | 47 | 57 | 5 | 77 | 112 | 5 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 8/5/2009 | 8/25/2009 | 8/25/2009 | 8/26/2009 | 5/13/2010 | 6/16/2010 | 6/17/2010 | 5/14/2010 |
| Parent Sample Code | | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4730 J** | **3170** | **4040** | **4510** | **6600 J** | **3370** | **6190** | **6100 J** |
| Antimony | 7440-36-0 | NE | NE | 16.9 UJ | 7.8 UJ | 5.3 UJ | 5.4 UJ | **3.6 J** | 4.5 U | 4.8 U | **6.2 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **83.3 J** | **26.1 J** | 6.8 U | 6.8 U | **14 J** | 5.7 U | **3.8 J** | **13 J** |
| Barium | 7440-39-3 | 10000 | 820 | **99.3 J** | **21.2 J** | **30.8 J** | **30.9 J** | **930 J** | **25.4** | **59.7** | **480 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.43 J** | 2.4 UJ | **0.27 J** | **0.32 J** | **0.66** | **0.21 J** | **0.35 J** | **0.66** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.5 J** | 2.4 UJ | 1.6 U | 1.6 U | **1.4 J** | 1.4 U | 1.4 U | **1.1 J** |
| Calcium | 7440-70-2 | NE | NE | **250000 J** | **240000 J** | **15800 J** | **11100 J** | **9400 J** | **6220** | **10700** | **8100 J** |
| Chromium | 7440-47-3 | NE | NE | **9.3 J** | 3.7 UJ | 11.6 UJ | 13.2 UJ | **20 J** | **12.4** | **32.2** | **32 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.6 UJ | 3.8 U | 0.8 U | 0.9 U | 0.92 U | 2.3 UJ | 2.3 UJ | 1.1 U |
| Cobalt | 7440-48-4 | NE | NE | **2.9 J** | 2.4 UJ | **4.3** | **4** | **6 J** | **2.9** | **5.9** | **6 J** |
| Copper | 7440-50-8 | 10000 | 1720 | **151 J** | 7.8 UJ | 10.5 UJ | 11.5 UJ | **270 J** | **10.4** | **19.2** | **2000 J** |
| Iron | 7439-89-6 | NE | NE | **9820 J** | 2130 UJ | **9980 J** | **10100 J** | **18000 J** | **11400** | **13900** | **24000 J** |
| Lead | 7439-92-1 | 3900 | 450 | **204 J** | **38.5 J** | 4.8 U | **3 J** | **750 J** | **1.5 J** | **2.7 J** | **1200 J** |
| Magnesium | 7439-95-4 | NE | NE | **13100 J** | **9560** | **8940** | **7650** | **2600 J** | **4020** | **5860** | **1700 J** |
| Manganese | 7439-96-5 | 10000 | 2000 | **178 J** | 120 U | **157** | **174** | **340 J** | **182** | **295** | **380 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **5.8 J** | **0.79** | **0.018 J** | **0.0073 J** | **1** | 0.052 UJ | 0.058 UJ | **3.5** |
| Nickel | 7440-02-0 | 10000 | 130 | **6.6 J** | 2.4 UJ | **10.7 J** | **10.5 J** | **17 J** | **7.3** | **16.6** | **80 J** |
| Potassium | 7440-09-7 | NE | NE | **582 J** | 118 U | **1230 J** | **1360 J** | **1100 J** | **743** | **1540** | **960 J** |
| Selenium | 7782-49-2 | 6800 | 4 | 38.4 UJ | 17.6 UJ | 12.1 U | 12.2 U | **0.27 J** | 10.2 U | 10.8 U | **0.17 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.71 J** | 2.4 UJ | 1.6 U | 1.6 U | **0.69** | **0.24 J** | **1.5** | **1** |
| Sodium | 7440-23-5 | NE | NE | **2140** | 1160 U | 337 U | 313 U | **1400** | **185** | **911** | **1800** |
| Thallium | 7440-28-0 | NE | NE | 15.4 UJ | **4.3 J** | 4.8 U | 4.9 U | 0.78 U | 4.1 U | 4.3 U | 0.94 U |
| Vanadium | 7440-62-2 | NE | NE | **11.5 J** | 7.8 UJ | **18.2** | **21.3** | **20 J** | **13.5** | **17.2** | **20 J** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1530 J** | 51.8 UJ | 23.9 UJ | 24.8 UJ | **2000** | **13.2** | **19.2** | **920** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.407 UJ | 0.378 U | 0.27 U | 0.264 U | NA | 0.22 U | 0.23 U | NA |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | 0.559 UJ | 0.578 UJ | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **48.8** | NA | **81.1** | **84.8** | **87** | NA | NA | **75** |
| Total Organic Carbon | TOC | NE | NE | **123000** | **100000** | **7510** | **6270** | NA | **1620** | **3270** | NA |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | PDI | PDI | PDI | PDI | PDI | PDI | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB101C/SB108 | GPEC-SB102/MW-102D | GPEC-SB102/MW-102D | GPEC-SB102/MW-102D | GPEC-SB102/MW-102D | GPEC-SB102/MW-102D | GPEC-TP300 | GPEC-TP300 | GPEC-TP301 |
| Sample Name | | | | GPEC-SB-101C (4-5) | GPEC-SB-102 (4-5) | GPEC-SB-102/MW102D (20-21) | GPEC-SB-102/MW102D (24-25) | GPEC-SB-102 (106-107) | GPEC-XX-061510 | GPEC-TP300A | GPEC-TP300B | GPEC-TP301A |
| Start Depth | | | | 4 | 4 | 20 | 24 | 106 | 106 | 3.5 | 10 | 2 |
| End Depth | | | | 5 | 5 | 21 | 25 | 107 | 107 | 4 | 10.5 | 2.5 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 5/13/2010 | 5/18/2010 | 6/11/2010 | 6/11/2010 | 6/15/2010 | 6/15/2010 | 10/7/2014 | 10/7/2014 | 10/9/2014 |
| Parent Sample Code | | | | | | | | | GPEC-SB-102 (106-107) | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0033 U | 0.0031 U | **0.52** | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.005 U | 0.0046 U | 0.62 U | 1.1 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | **61.3 D** | 11.6 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | NA | NA | NA | NA | 0.0058 UJ | 0.0061 U | 0.011 U | **103 D** | 23.2 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | **0.52** | ND | ND | ND | ND | **164.3** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.12 U | 0.11 U | **1.6 J** | **4.4 J** | 0.023 UJ | 0.024 U | 0.028 U | 44.2 U | 23.2 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.083 UJ | 0.077 U | NA | NA | NA | NA | 0.113 U | 442 U | 232 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | NA | NA | 0.113 U | 442 U | 232 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Bromoform | 75-25-2 | NE | NE | 0.013 U | 0.012 U | 1.7 U | 2.8 UJ | 0.0058 UJ | 0.0061 U | 0.011 U | 22.1 U | 11.6 U |
| Bromomethane | 74-83-9 | NE | NE | R | 0.0062 U | R | R | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | 0.012 U | 0.012 U | 0.00566 U | 22.1 U | 11.6 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | R | R | R | R | NA | NA | 0.011 U | 44.2 U | 23.2 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.033 UJ | 0.031 U | **1.1 J** | **2 J** | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.005 U | 0.0046 U | 0.62 U | 1.1 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Chloromethane | 74-87-3 | NE | NE | 0.017 U | 0.015 U | 2.1 U | 3.6 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.005 U | 0.0046 U | 0.62 U | 1.1 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.005 U | 0.0046 U | 0.62 U | 1.1 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.012 U | 0.011 U | 1.4 U | 2.5 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.013 U | 0.012 U | 1.7 U | 2.8 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | 0.012 UJ | 0.012 U | 0.00566 U | 22.1 U | 11.6 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.033 U | 0.031 U | **0.74 J** | **1.3 J** | 0.023 UJ | 0.024 UJ | 0.011 U | 44.2 U | 23.2 U |
| Styrene | 100-42-5 | NE | NE | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 UJ | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.067 U | 0.062 U | 8.3 UJ | 14 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.017 U | 0.015 U | 2.1 U | 3.6 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.005 U | 0.0046 U | 0.62 U | 1.1 UJ | 0.0058 UJ | 0.0061 UJ | 0.00566 U | 22.1 U | 11.6 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0033 U | 0.0031 U | 0.42 U | 0.71 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.017 U | 0.015 U | 2.1 U | 3.6 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.033 U | 0.031 U | 4.2 U | 7.1 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| Vinyl acetate | 108-05-4 | NE | NE | R | 0.031 U | 4.2 U | 7.1 UJ | NA | NA | 0.00566 U | 22.1 U | 11.6 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0067 U | 0.0062 U | 0.83 U | 1.4 UJ | 0.0058 U | 0.0061 U | 0.00566 U | 22.1 U | 11.6 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **3.96** | **7.7** | ND | ND | ND | **164.3** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.563** | **0.00879 J** | **0.308 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.1** | **30.7 D** | **15.6 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.374** | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | **0.466** | **1.54** | **37.9 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **2.19** | **0.0439 J** | **0.369 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.111** | **3.87** | **75 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **3.48** | **2.43** | **0.492 J** | 5.3 UJ | 0.31 U | **0.1 J** | **0.353** | **0.593** | **46.2 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **13** | **2.3** | **1.54 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.204** | **14.5 D** | **335 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.671** | 0.22 U | **0.308 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.087** | **10.3 D** | **82.2 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.132 J** | **0.0176 J** | **0.246 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.221** | **153 D** | **44.9 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.18 J** | **0.022 J** | **5.84** | **0.318 J** | 0.31 U | 0.32 U | **0.769** | **1510 D** | **213 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **9.17** | **0.404** | **1.91 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.202** | **18.3 D** | **347 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **11.6** | **1.88** | **1.41 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.166** | **4.19** | **188 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **6.97** | **1.72** | **0.676 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.145** | **1.8** | **133 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **5.3** | **1.68** | **0.492 J** | 5.3 UJ | 0.31 U | **0.016 J** | **0.289** | **1.14** | **102 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **5.31** | **4.3** | **0.369 J** | 5.3 UJ | 0.31 U | **0.019 J** | **0.205** | **1.06** | **109 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **3.55** | **2.14** | **0.615 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.103** | **0.956** | **36.7 D** |
| Chrysene | 218-01-9 | 110 | 1 | **6.34** | **2.85** | **0.676 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.164** | **1.68** | **115 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.16** | **0.742** | 3.08 U | 5.3 UJ | 0.31 U | **0.037 J** | **0.069** | **0.198** | **19.7 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **3.13** | **1.98** | **0.308 J** | 5.3 UJ | 0.31 U | **0.065 J** | **0.298** | **0.551** | **50.9 D** |
| Total PAHs | TPAH | NE | NE | **73.12** | **22.51829** | **15.559** | **0.318** | ND | **0.237** | **3.952** | **1754.378** | **1951.1** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB101C/SB108** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-TP300** | **GPEC-TP300** | **GPEC-TP301** |
| **Sample Name** | | | | **GPEC-SB-101C (4-5)** | **GPEC-SB-102 (4-5)** | **GPEC-SB-102/MW102D (20-21)** | **GPEC-SB-102/MW102D (24-25)** | **GPEC-SB-102 (106-107)** | **GPEC-XX-061510** | **GPEC-TP300A** | **GPEC-TP300B** | **GPEC-TP301A** |
| **Start Depth** | | | | **4** | **4** | **20** | **24** | **106** | **106** | **3.5** | **10** | **2** |
| **End Depth** | | | | **5** | **5** | **21** | **25** | **107** | **107** | **4** | **10.5** | **2.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/13/2010** | **5/18/2010** | **6/11/2010** | **6/11/2010** | **6/15/2010** | **6/15/2010** | **10/7/2014** | **10/7/2014** | **10/9/2014** |
| Parent Sample Code | | | | | | | | | GPEC-SB-102 (106-107) | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.236 U | 0.22 U | **50.7** | **113 J** | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| Azobenzene | 103-33-3 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | R | R | R | R | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | R | R | R | R | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.0709 J** | **0.154 J** | 3.08 U | 5.3 UJ | 0.31 U | **0.053 J** | **0.025 J** | **0.059** | 0.387 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | **0.021 J** | 0.037 U | 0.035 U | 0.387 U |
| Carbazole | 86-74-8 | NE | NE | **0.402** | **0.0308 J** | **0.184 J** | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | **0.67** | **45.3 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.34** | **0.0132 J** | **0.246 J** | 5.3 UJ | 0.31 U | 0.32 U | **0.083** | **10.9 D** | **52.9 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.38 U | 0.39 U | 0.037 U | 0.035 U | 0.387 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | **0.625 D** |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.946 U | 0.879 U | 12.3 U | 21.2 UJ | 2 UJ | 2 U | 0.372 U | 0.353 U | 3.87 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.946 UJ | 0.879 UJ | 12.3 UJ | 21.2 UJ | 2 U | 2 U | 0.372 U | 0.353 U | 3.87 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | **0.27 J** | 0.037 U | 0.035 U | 0.387 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | R | 0.8 U | 0.037 U | 0.035 U | 0.387 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 UJ | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | **0.777 D** |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.236 U | 0.22 U | **25.1** | **189 J** | 0.31 U | 0.32 U | 0.037 U | 0.035 U | **2.87 D** |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.236 U | 0.22 U | 3.08 UJ | 5.3 UJ | 0.77 U | 0.8 U | 0.037 U | 0.035 U | 0.387 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.77 U | 0.8 U | 0.037 U | 0.035 U | 0.387 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.473 U | 0.439 U | 6.15 UJ | 10.6 UJ | 2 U | 2 U | 0.037 U | 0.035 U | 0.387 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.946 UJ | 0.879 UJ | 12.3 UJ | 21.2 UJ | 0.77 U | 0.8 U | 0.037 U | 0.035 U | 0.387 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.236 U | 0.22 U | **92.1** | **210 J** | 0.31 U | 0.32 U | 0.037 U | 0.035 U | **3.06 D** |
| Pyridine | 110-86-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | NA | NA | 0.037 U | 0.035 U | 0.387 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 2 U | 2 U | 0.037 U | 0.035 U | 0.387 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.236 U | 0.22 U | 3.08 U | 5.3 UJ | 0.31 U | 0.32 U | 0.037 U | 0.035 U | 0.387 U |
| Total SVOCs | TSVOC | NE | NE | **73.9329** | **22.71629** | **183.889** | **512.318** | ND | **0.581** | **4.06** | **1766.007** | **2056.632** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | **0.0724** | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.0419 U | 0.0205 U | 0.138 U | 0.0474 UJ | 0.02 U | 0.021 U | 0.022 U | 0.022 U | 0.044 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.0724** | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB101C/SB108** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-SB102/MW-102D** | **GPEC-TP300** | **GPEC-TP300** | **GPEC-TP301** |
| **Sample Name** | | | | **GPEC-SB-101C (4-5)** | **GPEC-SB-102 (4-5)** | **GPEC-SB-102/MW102D (20-21)** | **GPEC-SB-102/MW102D (24-25)** | **GPEC-SB-102 (106-107)** | **GPEC-XX-061510** | **GPEC-TP300A** | **GPEC-TP300B** | **GPEC-TP301A** |
| **Start Depth** | | | | **4** | **4** | **20** | **24** | **106** | **106** | **3.5** | **10** | **2** |
| **End Depth** | | | | **5** | **5** | **21** | **25** | **107** | **107** | **4** | **10.5** | **2.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/13/2010** | **5/18/2010** | **6/11/2010** | **6/11/2010** | **6/15/2010** | **6/15/2010** | **10/7/2014** | **10/7/2014** | **10/9/2014** |
| Parent Sample Code | | | | | | | | | GPEC-SB-102 (106-107) | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | 0.055 U | 0.055 U | 0.273 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | 0.00438 U | **0.00288 J** | 0.022 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | 0.00438 U | **0.0034 J** | 0.022 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | 0.00438 U | 0.00439 U | 0.022 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | 0.055 U | 0.055 U | 0.273 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | 0.019 U | 0.017 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | 0.019 U | 0.017 U | 0.019 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7200 J** | **5000 J** | **4400 J** | **9400 J** | **3560** | **4080** | **5190** | **4240** | **5120** |
| Antimony | 7440-36-0 | NE | NE | **7.3 J** | **1.2 J** | 2.8 UJ | 5.7 UJ | 4.7 UJ | 4.8 U | 0.604 U | 0.588 U | **0.871** |
| Arsenic | 7440-38-2 | 16 | 16 | **34 J** | **4.5 J** | **36** | **11 J** | **2.6 J** | **3.7 J** | **10** | **2.27** | **22.8** |
| Barium | 7440-39-3 | 10000 | 820 | **440 J** | **33 J** | **92** | **36 J** | **28.5 J** | **24.6** | **52.5** | **21.1** | **382** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.81** | **0.39** | **0.5** | **0.78 J** | **0.34 J** | **0.4 J** | 0.604 U | 0.588 U | **0.401 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.2 J** | 0.44 U | **1.4** | **0.36 J** | 1.4 U | 1.4 U | **0.197 J** | 0.588 U | **1.03** |
| Calcium | 7440-70-2 | NE | NE | **12000 J** | **2100 J** | **190000 J** | **30000 J** | **7170** | **5710** | **11700** | **1370** | **9580** |
| Chromium | 7440-47-3 | NE | NE | **25 J** | **11 J** | **7.6** | **19 J** | **7.7** | **9.6** | **12.7** | **8.79** | **22.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.1 U | 0.99 U | R | R | 2.3 UJ | 2.4 UJ | 1.13 U | 1.11 U | **0.23 J** |
| Cobalt | 7440-48-4 | NE | NE | **8.5 J** | **3 J** | **1.6** | **3.9 J** | **4.5** | **5.4** | **3.26** | **3.37** | **6.47** |
| Copper | 7440-50-8 | 10000 | 1720 | **320 J** | **17 J** | **30** | **15 J** | **7 J** | **7.8** | **52.9** | **15.5** | **465** |
| Iron | 7439-89-6 | NE | NE | **29000 J** | R | **5100 J** | **9300 J** | **14900** | **16600** | **9870** | **8100** | **20600** |
| Lead | 7439-92-1 | 3900 | 450 | **580 J** | **51 J** | **110** | **40 J** | **2.5 J** | **3.4 J** | **75.3** | **8.15** | **710** |
| Magnesium | 7439-95-4 | NE | NE | **2600 J** | **1000 J** | **3300 J** | **3600 J** | **4270** | **3670** | **2060** | **1810** | **2580** |
| Manganese | 7439-96-5 | 10000 | 2000 | **410 J** | **170 J** | **110** | **54 J** | **233** | **256** | **137** | **156** | **334** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.9** | **0.05** | **0.67** | **0.036 J** | **0.0056 J** | 0.06 UJ | **0.199** | **0.046 J** | **10.3** |
| Nickel | 7440-02-0 | 10000 | 130 | **27 J** | **8.1 J** | **3.3** | **13 J** | **7.6** | **9.5** | **10** | **7.66** | **26** |
| Potassium | 7440-09-7 | NE | NE | **1500 J** | **780** | **660** | **2800 J** | **645** | **800** | **672** | **546** | **673** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.8** | **0.28 J** | 1.1 U | **1 J** | 10.8 U | 10.8 U | **0.685** | **0.774** | **1.02** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.85** | **0.14 J** | **0.2 J** | **0.19 J** | **0.25 J** | **0.28 J** | **0.157 J** | 0.588 U | **0.842** |
| Sodium | 7440-23-5 | NE | NE | **1200** | **260** | **2500** | **12000 J** | **186** | **210** | **203** | **164** | **957** |
| Thallium | 7440-28-0 | NE | NE | **2.9** | **0.3 J** | 1.1 U | 2.3 UJ | 4.3 U | 4.3 U | 0.604 U | 0.588 U | **0.479 J** |
| Vanadium | 7440-62-2 | NE | NE | **28 J** | **17 J** | **8.2** | **27 J** | **12.1 J** | **14** | **14.7** | **12** | **33.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **700** | **140 J** | **4400 J** | **470 J** | **18.6 J** | **20.5** | **85.1** | **21.1** | **561** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NA | NA | 0.354 U | 0.564 UJ | 0.23 U | 0.24 U | 2.8 U | 2.8 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | 0.581 UJ | 0.606 UJ | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **75** | **81** | **60** | **35** | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | NA | NA | NA | NA | **15400** | **11400** | **8710** | **4110** | **125000** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP301 | GPEC-TP303 | GPEC-TP303 | GPEC-TP303 | GPEC-TP304-305A | GPEC-TP306 | GPEC-TP306 | GPEC-TP307 | GPEC-TP307 |
| | | | Sample Name | GPEC-TP301B | GPEC-TP303A | GPEC-TP803A | GPEC-TP303B | GPEC-TP304-305A | GPEC-TP306A | GPEC-TP306B | GPEC-TP307A | GPEC-TP307B |
| | | | Start Depth | 12 | 3.5 | 3.5 | 9 | 3 | 3.5 | 8.5 | 3.5 | 10.5 |
| | | | End Depth | 12.5 | 4 | 4 | 9.5 | 3.5 | 4 | 9 | 4 | 11 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/9/2014 | 10/14/2014 | 10/14/2014 | 10/14/2014 | 10/15/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 |
| | | | Parent Sample Code | | | GPEC-TP303A | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **2.81** | 0.00538 U | 0.00536 U | 0.00772 U | **0.15 DJ** | **0.00253 DJ** | **2.42 D** | **10.6** | **22.5 D** |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.192** | 0.00538 U | 0.00536 U | **0.00215 DJ** | **0.184 DJ** | 0.00569 U | 0.589 U | **1.32** | 6.16 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.237** | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | **0.804 D** | **1.4** | **71.2 D** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.248 U | 0.011 U | 0.011 U | **0.011 DJ** | **0.338 DJ** | 0.011 U | 1.18 U | **2.14** | **7.99 DJ** |
| Total BTEX | TBTEX | NE | NE | **3.239** | ND | ND | **0.01315** | **0.672** | **0.00253** | **3.224** | **15.46** | **101.69** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.248 U | 0.027 U | 0.027 U | **0.655 D** | 0.47 U | 0.029 U | 1.18 U | 0.231 U | 12.3 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 2.48 U | 0.108 U | 0.107 U | 0.154 U | 4.7 U | 0.114 U | 11.8 U | 2.31 U | 123 U |
| Acrylonitrile | 107-13-1 | NE | NE | 2.48 U | 0.108 U | 0.107 U | 0.154 U | 4.7 U | 0.114 U | 11.8 U | 2.31 U | 123 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Bromoform | 75-25-2 | NE | NE | 0.124 U | 0.011 U | 0.011 U | 0.015 U | 0.235 U | 0.011 U | 0.589 U | 0.115 U | 6.16 U |
| Bromomethane | 74-83-9 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.124 U | 0.00538 U | 0.00536 U | **0.102 D** | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.248 U | 0.011 U | 0.011 U | 0.015 U | 0.47 U | 0.011 U | 1.18 U | 0.231 U | 12.3 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Chloromethane | 74-87-3 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.248 U | 0.011 U | 0.011 U | 0.015 U | 0.47 U | 0.011 U | 1.18 U | 0.231 U | 12.3 U |
| Styrene | 100-42-5 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.124 U | 0.00538 U | 0.00536 U | 0.00772 U | 0.235 U | 0.00569 U | 0.589 U | 0.115 U | 6.16 U |
| Total VOCs | TVOC | NE | NE | **3.239** | ND | ND | **0.77015** | **0.672** | **0.00253** | **3.224** | **15.46** | **101.69** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.639** | **0.228 D** | **0.219** | **1.29 D** | **18.6 D** | **0.535** | **0.576** | **0.629** | **32.3 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.266** | **1.38 D** | **1.97** | **0.307 D** | **132 D** | **0.257** | **0.237** | **0.824** | **8.12 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.57** | **1.82 D** | **1.7** | **3.15 D** | **140 D** | **0.514** | **0.358** | **0.573** | **3.17** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.35** | **2.21 D** | **3.13** | **1.93 D** | **49.9 D** | **0.736** | **0.599** | **0.593** | **1.09** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **7.73 D** | **9.18 D** | **10.3 D** | **13 D** | **355 D** | **3.34** | **2.25** | **2.32** | **13.6 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.497** | **0.922 D** | **1.03** | **1.43 D** | **177 D** | **0.527** | **0.336** | **0.6** | **12.8 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.143** | **0.516 D** | **0.518** | **0.551 D** | **123 D** | **0.338** | **2.99** | **1.45** | **129 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **1.15** | **0.839 D** | **0.937** | **1.48 D** | **597 D** | **1.16** | **2.07** | **6.4 D** | **733 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **3.68** | **8.01 D** | **7.12 D** | **13.9 D** | **523 D** | **1.92** | **1.56** | **2.24** | **43.8 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **5.96 D** | **7.73 D** | **8.47 D** | **10.6 D** | **208 D** | **2.31** | **1.71** | **1.83** | **3.12** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **4.02 D** | **4.79 D** | **5.35 D** | **5.8 D** | **134 D** | **1.5** | **1.07** | **0.827** | **3.72** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **4.13** | **3.27 D** | **3.86 D** | **3.45 D** | **99.6 D** | **1.07** | **0.884** | **0.734** | **2.27** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **4.13** | **3.43 D** | **3.95 D** | **3.11 D** | **86.5 D** | **1.05** | **0.864** | **0.721** | **1.86** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.35** | **2.18 D** | **2.06** | **2.18 D** | **84.3 D** | **0.911** | **0.61** | **0.541** | **1.46** |
| Chrysene | 218-01-9 | 110 | 1 | **4.24 D** | **5.44 D** | **5.38 D** | **5.66 D** | **111 D** | **1.63** | **1.2** | **1.04** | **3.73** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.726** | **0.7 D** | **0.835** | **0.901 D** | **23 D** | **0.293** | **0.237** | **0.221** | **0.368** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **2.19** | **1.99 D** | **2.64** | **1.78 D** | **49.2 D** | **0.659** | **0.532** | **0.513** | **1** |
| Total PAHs | TPAH | NE | NE | **45.771** | **54.635** | **59.469** | **70.519** | **2911.1** | **18.75** | **18.083** | **22.056** | **994.408** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP301 | GPEC-TP303 | GPEC-TP303 | GPEC-TP303 | GPEC-TP304-305A | GPEC-TP306 | GPEC-TP306 | GPEC-TP307 | GPEC-TP307 | |
| | | | Sample Name | GPEC-TP301B | GPEC-TP303A | GPEC-TP803A | GPEC-TP303B | GPEC-TP304-305A | GPEC-TP306A | GPEC-TP306B | GPEC-TP307A | GPEC-TP307B | |
| | | | Start Depth | 12 | 3.5 | 3.5 | 9 | 3 | 3.5 | 8.5 | 3.5 | 10.5 | |
| | | | End Depth | 12.5 | 4 | 4 | 9.5 | 3.5 | 4 | 9 | 4 | 11 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 10/9/2014 | 10/14/2014 | 10/14/2014 | 10/14/2014 | 10/15/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 | |
| | | | Parent Sample Code | | | GPEC-TP303A | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | **0.03 J** | **0.054** | 0.041 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Carbazole | 86-74-8 | NE | NE | **0.296** | **0.742 D** | **0.517** | **1.25 D** | **78.6 D** | **0.207** | **0.191** | **0.244** | 0.041 U | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.346** | **0.47 D** | **0.486** | **1.11 D** | **119 D** | **0.424** | **0.208** | **0.399** | **8.1 D** | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | **3.17 D** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.413 U | 1.41 U | 0.357 U | 1.51 U | 3.83 U | 0.364 U | 0.375 U | 0.376 U | 0.408 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.413 U | 1.41 U | 0.357 U | 1.51 U | 3.83 U | 0.364 U | 0.375 U | 0.376 U | 0.408 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | **3.5 D** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | **9.82 D** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Phenol | 108-95-2 | 1000 | 0.33 | **0.032 J** | 0.141 U | 0.036 U | 0.151 U | **8.59 D** | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Pyridine | 110-86-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.041 U | 0.141 U | 0.036 U | 0.151 U | 0.383 U | 0.036 U | 0.038 U | 0.038 U | 0.041 U | |
| Total SVOCs | TSVOC | NE | NE | **46.445** | **55.847** | **60.472** | **72.879** | **3133.78** | **19.381** | **18.512** | **22.753** | **1002.508** | |
| **PCBs (mg/kg)** | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.047 U | 0.042 U | 0.041 U | 0.061 U | 0.044 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP301 | GPEC-TP303 | GPEC-TP303 | GPEC-TP303 | GPEC-TP304-305A | GPEC-TP306 | GPEC-TP306 | GPEC-TP307 | GPEC-TP307 |
| | | | Sample Name | GPEC-TP301B | GPEC-TP303A | GPEC-TP803A | GPEC-TP303B | GPEC-TP304-305A | GPEC-TP306A | GPEC-TP306B | GPEC-TP307A | GPEC-TP307B |
| | | | Start Depth | 12 | 3.5 | 3.5 | 9 | 3 | 3.5 | 8.5 | 3.5 | 10.5 |
| | | | End Depth | 12.5 | 4 | 4 | 9.5 | 3.5 | 4 | 9 | 4 | 11 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/9/2014 | 10/14/2014 | 10/14/2014 | 10/14/2014 | 10/15/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 | 10/7/2014 |
| | | | Parent Sample Code | | | GPEC-TP303A | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.295 U | 0.264 U | 0.257 U | 0.076 U | **1.31 D** | 0.056 U | 0.054 U | 0.054 U | 0.058 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | **0.09 D** | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.024 U | 0.021 U | 0.021 U | **0.00659** | **0.197 D** | **0.00273 J** | 0.00433 U | 0.00434 U | **0.012** |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.024 U | 0.021 U | 0.021 U | 0.0061 U | 0.044 U | 0.00451 U | 0.00433 U | 0.00434 U | 0.00466 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.295 U | 0.264 U | 0.257 U | 0.076 U | 0.553 U | 0.056 U | 0.054 U | 0.054 U | 0.058 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.017 U | 0.018 U | 0.025 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.02 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.017 U | 0.018 U | 0.025 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.02 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7990** | **5920** | **5590** | **6000** | **9140** | **6180** | **5370** | **6890** | **5680** |
| Antimony | 7440-36-0 | NE | NE | **0.947** | 0.54 U | 0.594 U | 0.837 U | 0.617 U | **0.371 J** | 0.653 U | **0.428 J** | 0.638 U |
| Arsenic | 7440-38-2 | 16 | 16 | **14** | **4.04** | **3.2** | **180** | **5.66** | **7.75** | **7.11** | **10.8** | **2.48** |
| Barium | 7440-39-3 | 10000 | 820 | **464** | **74.2** | **49.3** | **76.8** | **117** | **148** | **77.8** | **74.2** | **24.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.461 J** | **0.306 J** | **0.332 J** | **0.365 J** | **0.398 J** | **0.508 J** | **0.41 J** | **0.536 J** | **0.278 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.55** | **0.339 J** | **0.253 J** | **0.472 J** | **0.504 J** | **0.586 J** | **0.655** | **1.04** | 0.638 U |
| Calcium | 7440-70-2 | NE | NE | **17100** | **3890** | **3620** | **107000** | **4240** | **7790** | **8290** | **6430** | **740** |
| Chromium | 7440-47-3 | NE | NE | **24** | **14.4** | **11.7** | **11.3** | **20.3** | **20** | **13** | **16.1** | **13.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **8.27** | **0.214 J** | 1.07 U | 1.54 U | 1.18 U | 1.14 U | **0.234 J** | 1.15 U | 1.23 U |
| Cobalt | 7440-48-4 | NE | NE | **7.1** | **4.35** | **3.3** | **4.94** | **6.26** | **5.29** | **5.29** | **5.08** | **5.59** |
| Copper | 7440-50-8 | 10000 | 1720 | **1000** | **72** | **50.4** | **249** | **53.1** | **131** | **130** | **202** | **13** |
| Iron | 7439-89-6 | NE | NE | **29000** | **11900** | **11500** | **13300** | **16700** | **15900** | **12600** | **16000** | **9080** |
| Lead | 7439-92-1 | 3900 | 450 | **1080** | **86.1** | **71.3** | **419** | **166** | **1570** | **124** | **186** | **6.89** |
| Magnesium | 7439-95-4 | NE | NE | **2550** | **1890** | **1870** | **4290** | **2060** | **2240** | **1510** | **2670** | **1560** |
| Manganese | 7439-96-5 | 10000 | 2000 | **754** | **212** | **211** | **298** | **261** | **212** | **182** | **141** | **204** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.74** | **1.39** | **0.989** | **2.87** | **0.401** | **0.837** | **0.634** | **1.99** | **0.031 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **51.1** | **11.9** | **9.9** | **13.3** | **13.2** | **16.7** | **14.4** | **33.9** | **9.07** |
| Potassium | 7440-09-7 | NE | NE | **895** | **717** | **654** | **649** | **799** | **869** | **653** | **614** | **532** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.18** | **1.27** | **1.35** | **1.36** | **1.42** | **1.37** | **1.19** | **1.8** | **0.998** |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.44** | 0.54 U | 0.594 U | **0.312 J** | 0.617 U | **3.8** | **0.29 J** | **0.323 J** | 0.638 U |
| Sodium | 7440-23-5 | NE | NE | **532** | **389** | **387** | **928** | **398** | **381** | **225** | **1060** | **776** |
| Thallium | 7440-28-0 | NE | NE | **0.295 J** | **0.352 J** | **0.281 J** | **0.224 J** | **0.359 J** | **0.274 J** | **0.182 J** | **0.236 J** | 0.638 U |
| Vanadium | 7440-62-2 | NE | NE | **27.1** | **22.8** | **19** | **15.2** | **26.6** | **19.2** | **21.9** | **23.9** | **15.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1330** | **107** | **94.6** | **168** | **137** | **246** | **190** | **351** | **24.8** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.7 U | 2.7 U | 3.9 U | 2.9 U | 2.8 U | 2.9 U | 2.9 U | 3.1 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **25300** | **20900** | **10600** | **81600** | **22000** | **20000** | **47700** | **103000** | **23900** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-TP308 | GPEC-TP308 | GPEC-TP309 | GPEC-TP310 | GPEC-TP310 | GPEC-TP311 | GPEC-TP311 | GPEC-TP312 |
| Sample Name | | | | GPEC-TP308A | GPEC-TP308B | GPEC-TP309A | GPEC-TP310A | GPEC-TP310B | GPEC-TP311A | GPEC-TP311B | GPEC-TP312 |
| Start Depth | | | | 3.5 | 9.5 | 5.5 | 1.5 | 3.5 | 2 | 7.5 | 5.5 |
| End Depth | | | | 5 | 10 | 6 | 2 | 4 | 2.5 | 8 | 6 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 10/3/2014 | 10/3/2014 | 10/3/2014 | 10/1/2014 | 10/1/2014 | 9/29/2014 | 9/29/2014 | 9/24/2014 |
| Parent Sample Code | | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **24 D** | **1.34 D** | **7.08 D** | **2.23 J** | **2.83 J** | 0.00575 UJ | 0.00576 UJ | **2.25** |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.838 D** | 0.227 U | **1.09 D** | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | **0.058 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **1.39 D** | **0.827 D** | **2.52 D** | **3.28 J** | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | **0.113 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **1.72 D** | **0.965 D** | **2.5 D** | **1.53 J** | 2.51 UJ | 0.012 UJ | 0.012 UJ | **0.224 J** |
| Total BTEX | TBTEX | NE | NE | **27.948** | **3.132** | **13.19** | **7.04** | **2.83** | ND | ND | **2.645** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.456 U | 0.454 U | 0.539 U | 2.29 UJ | 2.51 UJ | 0.029 UJ | 0.029 UJ | 0.245 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 4.56 U | 4.54 U | 5.39 U | 22.9 R | 25.1 R | 0.115 R | 0.115 R | 2.45 U |
| Acrylonitrile | 107-13-1 | NE | NE | 4.56 U | 4.54 U | 5.39 U | 22.9 UJ | 25.1 UJ | 0.115 UJ | 0.115 UJ | 2.45 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Bromoform | 75-25-2 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.012 UJ | 0.012 UJ | 0.122 U |
| Bromomethane | 74-83-9 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.456 U | 0.454 U | 0.539 U | 2.29 UJ | 2.51 UJ | 0.012 R | 0.012 R | 0.245 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | **0.323** |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Chloromethane | 74-87-3 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | **0.296** |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.456 U | 0.454 U | 0.539 U | 2.29 UJ | 2.51 UJ | 0.012 UJ | 0.012 UJ | 0.245 U |
| Styrene | 100-42-5 | NE | NE | 0.228 U | 0.227 U | **0.522 D** | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | **0.257** |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.228 U | 0.227 U | 0.27 U | 1.14 UJ | 1.25 UJ | 0.00575 UJ | 0.00576 UJ | 0.122 U |
| Total VOCs | TVOC | NE | NE | **27.948** | **3.132** | **13.712** | **7.04** | **2.83** | ND | ND | **3.521** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **1.79 D** | **5.83 D** | **1.24 D** | **2.76** | **2.49** | **0.301** | **1.49** | **2.26** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **1.17 D** | **0.959 D** | **6.17 D** | **0.546** | **0.508** | **0.444** | **0.169** | **0.177** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.942 D** | **1.53 D** | **1.39 D** | **0.894** | **0.745** | **1.17** | **4.15** | **0.988** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.827 D** | **0.278 D** | **1.1 D** | **1.59** | **0.694** | **3.91** | **4.41** | **0.724** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **1.96 D** | **2.06 D** | **3.86 D** | **2.37** | **1.1** | **6.48** | **13.6** | **5.69 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.888 D** | **2.44 D** | **1.72 D** | **1.74** | **1.1** | **0.311** | **1.76** | **1.89** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **1.92 D** | **10.6 D** | **1.44 D** | **10.1** | **3.82** | **0.201** | **0.299** | **0.485** |
| Naphthalene | 91-20-3 | 1000 | 12 | **10.2 D** | **9.14 D** | **5.44 D** | **21.8** | **8.53** | **0.461** | **0.353** | **4.89 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **3.25 D** | **8.03 D** | **6.5 D** | **3.7** | **1.71** | **2.8** | **12.5** | **7.57 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **1.96 D** | **1.74 D** | **3.34 D** | **2.79** | **1.69** | **6.7** | **10.5** | **4.96 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.817 D** | **0.614 D** | **1.11 D** | **1.83** | **0.761** | **3.92** | **7.56** | **1.41** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.938 D** | **0.411 D** | **0.934 D** | **2.01** | **0.801** | **3.78** | **5.68** | **0.907** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.846 D** | **0.295 D** | **1.19 D** | **2.12** | **0.677** | **4.34** | **5.02** | **1.04** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.52 D** | **0.26 D** | **0.693 D** | **0.954** | **0.431** | **2.8** | **3.48** | **1.04** |
| Chrysene | 218-01-9 | 110 | 1 | **0.959 D** | **0.658 D** | **1.58 D** | **2.05** | **0.879** | **4.32** | **7.25** | **1.58** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.326 D** | **0.109 D** | **0.333 D** | **0.597** | **0.213** | **1.54** | **1.99** | **0.232** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.764 D** | **0.248 D** | **0.971 D** | **1.47** | **0.542** | **3.39** | **4.45** | **0.648** |
| Total PAHs | TPAH | NE | NE | **30.077** | **45.202** | **39.011** | **59.321** | **26.691** | **46.868** | **84.661** | **36.491** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP308 | GPEC-TP308 | GPEC-TP309 | GPEC-TP310 | GPEC-TP310 | GPEC-TP311 | GPEC-TP311 | GPEC-TP311 | GPEC-TP312 |
| | | | Sample Name | GPEC-TP308A | GPEC-TP308B | GPEC-TP309A | GPEC-TP310A | GPEC-TP310B | GPEC-TP311A | GPEC-TP311B | GPEC-TP312 | |
| | | | Start Depth | 3.5 | 9.5 | 5.5 | 1.5 | 3.5 | 2 | 7.5 | 5.5 | |
| | | | End Depth | 5 | 10 | 6 | 2 | 4 | 2.5 | 8 | 6 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 10/3/2014 | 10/3/2014 | 10/3/2014 | 10/1/2014 | 10/1/2014 | 9/29/2014 | 9/29/2014 | 9/24/2014 | |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | **0.182** | 0.037 U | 0.037 U | 0.039 U | |
| Benzoic acid | 65-85-0 | NE | 2.7 | 1.13 U | 1.09 U | 0.855 U | 0.375 U | 1.24 U | 0.37 U | 0.372 U | 0.039 U | |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.113 U | 0.109 U | **0.218 D** | **0.056** | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Carbazole | 86-74-8 | NE | NE | **0.344 D** | **0.315 D** | **0.621 D** | 0.038 U | 0.124 U | **0.223** | **1.87** | **0.67** | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.535 D** | **1.24 D** | **0.797 D** | **1.25** | **0.595** | **0.31** | **0.906** | **1.37** | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.13 U | 1.09 U | 0.855 U | 0.375 U | 1.24 U | 0.37 U | 0.372 U | 0.039 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.13 U | 1.09 U | 0.855 U | 0.375 U | 1.24 U | 0.37 U | 0.372 U | 0.039 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.113 U | 0.109 U | **0.068 DJ** | **0.023 J** | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Pyridine | 110-86-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.113 U | 0.109 U | 0.086 U | 0.038 U | 0.124 U | 0.037 U | 0.037 U | 0.039 U | |
| Total SVOCs | TSVOC | NE | NE | **30.956** | **46.757** | **40.715** | **60.65** | **27.468** | **47.401** | **87.437** | **38.531** | |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | **0.597** | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.021 U | 0.027 U | 0.021 U | 0.025 U | 0.023 U | 0.023 U | 0.046 U | |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.597** | ND | ND | ND | ND | ND | ND | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-TP308 | GPEC-TP308 | GPEC-TP309 | GPEC-TP310 | GPEC-TP310 | GPEC-TP311 | GPEC-TP311 | GPEC-TP312 |
| | | | | Sample Name | GPEC-TP308A | GPEC-TP308B | GPEC-TP309A | GPEC-TP310A | GPEC-TP310B | GPEC-TP311A | GPEC-TP311B | GPEC-TP312 |
| | | | | Start Depth | 3.5 | 9.5 | 5.5 | 1.5 | 3.5 | 2 | 7.5 | 5.5 |
| | | | | End Depth | 5 | 10 | 6 | 2 | 4 | 2.5 | 8 | 6 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 10/3/2014 | 10/3/2014 | 10/3/2014 | 10/1/2014 | 10/1/2014 | 9/29/2014 | 9/29/2014 | 9/24/2014 |
| | | | | Parent Sample Code | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | | 0.053 U | 0.053 U | 0.066 U | 0.053 U | 0.062 U | 0.057 U | 0.057 U | 0.058 U |
| Chlordane | 57-74-9 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endosulfan I | 959-98-8 | 920 | 102 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endrin | 72-20-8 | 410 | 0.06 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Endrin ketone | 53494-70-5 | NE | NE | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Methoxychlor | 72-43-5 | NE | 900 | | 0.00424 U | 0.0042 U | 0.00529 U | 0.00422 U | 0.00498 U | 0.00454 U | 0.00454 U | 0.00462 U |
| Toxaphene | 8001-35-2 | NE | NE | | 0.053 U | 0.053 U | 0.066 U | 0.053 U | 0.062 U | 0.057 U | 0.057 U | 0.058 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | | 0.018 U | 0.018 U | 0.022 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | | 0.018 U | 0.018 U | 0.022 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | | **8440** | **8350** | **7260** | **5340** | **5870** | **6020** | **6250** | **6760** |
| Antimony | 7440-36-0 | NE | NE | | 0.614 U | 0.565 U | 0.724 U | 0.586 U | **0.742** | 0.62 U | **0.342 J** | 0.652 U |
| Arsenic | 7440-38-2 | 16 | 16 | | **8.42** | **1.85** | **10.6** | **7.88** | **14.8** | **10.8** | **9.85** | **5.14** |
| Barium | 7440-39-3 | 10000 | 820 | | **70** | **22.3** | **120** | **83.4** | **181** | **283** | **402** | **58.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | | **0.364 J** | **0.401 J** | **0.655 J** | **0.286 J** | **0.368 J** | **0.386 J** | **0.398 J** | **0.55 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | | **1.11** | 0.565 U | **0.888** | **0.307 J** | **0.584 J** | **1.91** | **0.974** | **0.322 J** |
| Calcium | 7440-70-2 | NE | NE | | **5790** | **448** | **16300** | **9240** | **25200** | **4960** | **10600** | **3640** |
| Chromium | 7440-47-3 | NE | NE | | **19.6** | **17.6** | **21** | **11.6** | **12.7** | **143** | **142** | **18.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | | 1.14 U | 1.13 U | 1.35 U | 1.14 UJ | 1.25 UJ | 1.15 UJ | 1.15 UJ | 1.22 U |
| Cobalt | 7440-48-4 | NE | NE | | **6.56** | **4.42** | **6.25** | **4.49** | **3.72** | **5.93** | **6.86** | **7.63** |
| Copper | 7440-50-8 | 10000 | 1720 | | **153** | **23.5** | **206** | **83** | **111** | **187** | **140** | **68.6** |
| Iron | 7439-89-6 | NE | NE | | **17900** | **12600** | **22200** | **12400** | **16800** | **17300** | **16900** | **19900** |
| Lead | 7439-92-1 | 3900 | 450 | | **170** | **3.9** | **271** | **197** | **899** | **955** | **1180** | **69.5** |
| Magnesium | 7439-95-4 | NE | NE | | **3060** | **2100** | **3680** | **1950** | **2530** | **1910** | **2220** | **2110** |
| Manganese | 7439-96-5 | 10000 | 2000 | | **208** | **110** | **173** | **221** | **320** | **344** | **281** | **291** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | | **6.93** | 0.057 U | **4.59** | **6.08 J** | **9.52 J** | **1.78** | **3.41 J** | **0.439** |
| Nickel | 7440-02-0 | 10000 | 130 | | **27.1** | **9.64** | **19.3** | **12** | **21.3** | **18.9** | **16.5** | **16.7** |
| Potassium | 7440-09-7 | NE | NE | | **728** | **568** | **1220** | **810** | **900** | **745** | **773** | **1250** |
| Selenium | 7782-49-2 | 6800 | 4 | | **1.04** | **0.762** | **2.14** | **1.05** | **0.971** | **1.65** | **1.59** | **2.07** |
| Silver | 7440-22-4 | 6800 | 8.3 | | **0.278 J** | 0.565 U | **0.437 J** | **0.373 J** | **0.239 J** | **0.431 J** | **0.529 J** | 0.652 U |
| Sodium | 7440-23-5 | NE | NE | | **497** | **348** | **1270** | **748** | **770** | **532** | **577** | **689** |
| Thallium | 7440-28-0 | NE | NE | | 0.614 U | **0.362 J** | **0.186 J** | **0.184 J** | **0.18 J** | **1.15** | **0.562 J** | **0.314 J** |
| Vanadium | 7440-62-2 | NE | NE | | **27.3** | **18.1** | **47** | **19** | **15.9** | **23.1** | **19.8** | **27.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | | **195** | **23.4** | **218** | **163** | **236** | **467** | **513** | **115** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | | 2.8 U | 2.8 U | 3.4 U | 2.9 U | 3.1 U | 2.9 U | 2.9 U | 3.1 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | | **52100** | **5330** | **94300** | **48900** | **51100** | **83900** | **33400** | **22300** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP313 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP316 | GPEC-TP316 | GPEC-TP316 | GPEC-TP317 | GPEC-TP317 |
| | | | Sample Name | GPEC-TP313A | GPEC-TP314A | GPEC-TP814A | GPEC-TP314B | GPEC-TP314C | GPEC-TP316A | GPEC-TP316B | GPEC-TP317A | GPEC-TP317B | |
| | | | Start Depth | 6 | 1.5 | 1.5 | 4 | 6.5 | 8 | 2.5 | 3 | 6 | |
| | | | End Depth | 6.5 | 2 | 2 | 4.5 | 7 | 8.5 | 3 | 3.5 | 6.5 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 9/23/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/23/2014 | 9/23/2014 | 9/22/2014 | 9/22/2014 | |
| | | | Parent Sample Code | | | GPEC-TP314A | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 1.28 U | 0.00545 UJ | 0.00604 UJ | **0.134 J** | **9.08 J** | **0.036 D** | 0.00634 U | 0.00639 U | 0.00632 U | |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.524 DJ** | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | **0.00293 DJ** | 0.00634 U | 0.00639 U | 0.00632 U | |
| Ethylbenzene | 100-41-4 | 780 | 1 | **7.09 D** | 0.00545 UJ | 0.00604 UJ | **0.206 J** | **0.491 J** | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **60.5 D** | 0.011 UJ | 0.012 UJ | 0.226 UJ | **0.24 J** | 0.015 U | 0.013 U | 0.013 U | 0.013 U | |
| Total BTEX | TBTEX | NE | NE | **68.114** | ND | ND | **0.34** | **9.811** | **0.03893** | ND | ND | ND | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 2.56 U | 0.027 UJ | 0.03 UJ | 0.226 UJ | 0.247 UJ | 0.036 U | 0.032 U | 0.032 U | 0.032 U | |
| Acrolein (propenal) | 107-02-8 | NE | NE | 25.6 U | 0.109 R | 0.121 R | 2.26 R | 2.47 R | 0.146 U | 0.127 U | 0.128 U | 0.126 U | |
| Acrylonitrile | 107-13-1 | NE | NE | 25.6 U | 0.109 UJ | 0.121 UJ | 2.26 UJ | 2.47 UJ | 0.146 U | 0.127 U | 0.128 U | 0.126 U | |
| Bromodichloromethane | 75-27-4 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Bromoform | 75-25-2 | NE | NE | 1.28 U | 0.011 UJ | 0.012 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Bromomethane | 74-83-9 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 2.56 U | 0.011 R | 0.012 R | 0.226 UJ | 0.247 UJ | 0.073 U | 0.063 U | 0.064 U | 0.063 U | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Chloroethane | 75-00-3 | NE | 1.9 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Chloroform | 67-66-3 | 700 | 0.37 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Chloromethane | 74-87-3 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Dibromochloromethane | 124-48-1 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Diisopropyl ether | 108-20-3 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 2-Hexanone | 591-78-6 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 2.56 U | 0.011 UJ | 0.012 UJ | 0.226 UJ | 0.247 UJ | **0.045 CD** | 0.013 U | 0.013 U | **0.054 CD** | |
| Styrene | 100-42-5 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Vinyl acetate | 108-05-4 | NE | NE | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 1.28 U | 0.00545 UJ | 0.00604 UJ | 0.113 UJ | 0.123 UJ | 0.00728 U | 0.00634 U | 0.00639 U | 0.00632 U | |
| Total VOCs | TVOC | NE | NE | **68.114** | ND | ND | **0.34** | **9.811** | **0.08393** | ND | ND | **0.054** | |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.62 D** | 0.036 U | 0.039 U | **1.43** | **10.8** | **0.582 D** | **0.051** | **0.274** | **0.162 D** | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.425 U | **0.025 J** | **0.041** | **0.356** | **1.22** | **0.346 D** | 0.041 U | **0.044** | 0.084 U | |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.425 U | **0.087** | **0.084** | **0.874** | **2.48** | **1.85 D** | **0.14** | **0.477** | **0.804 D** | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.425 U | **0.127 J** | **0.284 J** | **0.365** | **1.26** | **1.92 D** | **0.49** | **0.609** | **3.25 D** | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.572 D** | **0.205 J** | **0.394 J** | **1.5** | **4.65** | **8.83 D** | **0.648** | **3.07** | **4.94 D** | |
| Fluorene | 86-73-7 | 1000 | 386 | **1.77 D** | 0.036 U | 0.039 U | **1.15** | **4.67** | **0.776 D** | **0.096** | **0.21** | **0.106 D** | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **39.3 D** | 0.036 U | 0.039 U | **1.86** | **14.7** | **0.258 D** | **0.176** | **0.075** | 0.084 U | |
| Naphthalene | 91-20-3 | 1000 | 12 | **239 D** | **0.031 J** | **0.069** | **3.96** | **22.9** | **0.798 D** | **0.235** | **0.137** | **0.116 D** | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.46 D** | **0.116 J** | **0.209 J** | **3.03** | **14.5** | **5.09 D** | **0.648** | **2.47** | **2.48 D** | |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.512 D** | **0.33** | **0.452** | **1.27** | **4.32** | **10.5 D** | **0.742** | **2.99** | **7.12 D** | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.425 U | **0.106 J** | **0.257 J** | **0.51** | **2.48** | **4.47 D** | **0.388** | **1.55** | **4.32 D** | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.425 U | **0.125 J** | **0.254 J** | **0.411** | **1.75** | **3.53 D** | **0.447** | **1.6** | **4.56 D** | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.425 U | **0.1 J** | **0.257 J** | **0.309** | **1.57** | **2.21 D** | **0.434** | **1.39** | **3.82 D** | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.425 U | **0.075 J** | **0.165 J** | **0.337** | **1.05** | **2.51 D** | **0.331** | **1.26** | **2.96 D** | |
| Chrysene | 218-01-9 | 110 | 1 | 0.425 U | **0.128 J** | **0.289 J** | **0.558** | **2.5** | **4.38 D** | **0.553** | **1.7** | **4.05 D** | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.425 U | **0.038** | **0.075** | **0.106** | **0.438** | **0.649 D** | **0.15** | **0.321** | **1.2 D** | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.425 U | **0.113 J** | **0.252 J** | **0.331** | **1.16** | **1.66 D** | **0.294** | **0.657** | **2.79 D** | |
| Total PAHs | TPAH | NE | NE | **283.234** | **1.606** | **3.082** | **18.357** | **92.448** | **50.359** | **5.823** | **18.834** | **42.678** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP313 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP316 | GPEC-TP316 | GPEC-TP317 | GPEC-TP317 |
| | | | Sample Name | GPEC-TP313A | GPEC-TP314A | GPEC-TP814A | GPEC-TP314B | GPEC-TP314C | GPEC-TP316A | GPEC-TP316B | GPEC-TP317A | GPEC-TP317B |
| | | | Start Depth | 6 | 1.5 | 1.5 | 4 | 6.5 | 8 | 2.5 | 3 | 6 |
| | | | End Depth | 6.5 | 2 | 2 | 4.5 | 7 | 8.5 | 3 | 3.5 | 6.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/23/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/23/2014 | 9/23/2014 | 9/22/2014 | 9/22/2014 |
| | | | Parent Sample Code | | | GPEC-TP314A | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.425 U | 0.36 U | 0.389 U | 0.37 U | 0.391 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.425 U | **0.022 J** | **0.027 J** | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Carbazole | 86-74-8 | NE | NE | 0.425 U | 0.036 U | 0.039 U | **0.18** | **1.62** | **0.279 D** | **0.037 J** | **0.205** | **0.392 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **1.9 D** | 0.036 U | 0.039 U | **0.565** | **3.29** | **0.409 D** | **0.08** | **0.126** | **0.088 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.425 U | 0.36 U | 0.389 U | 0.37 U | 0.391 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.425 U | 0.36 U | 0.389 U | 0.37 U | 0.391 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | **0.252** | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Pyridine | 110-86-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.425 U | 0.036 U | 0.039 U | 0.037 U | 0.039 U | 0.235 U | 0.041 U | 0.042 U | 0.084 U |
| Total SVOCs | TSVOC | NE | NE | **285.134** | **1.628** | **3.109** | **19.102** | **97.61** | **51.047** | **5.94** | **19.165** | **43.158** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.048 U | **0.033** | **0.067** | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.048 U | 0.021 U | 0.023 U | 0.022 U | 0.024 U | 0.054 U | 0.05 U | 0.047 U | 0.05 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.033** | **0.067** | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP313 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP314 | GPEC-TP316 | GPEC-TP316 | GPEC-TP317 | GPEC-TP317 |
| | | | Sample Name | GPEC-TP313A | GPEC-TP314A | GPEC-TP814A | GPEC-TP314B | GPEC-TP314C | GPEC-TP316A | GPEC-TP316B | GPEC-TP317A | GPEC-TP317B |
| | | | Start Depth | 6 | 1.5 | 1.5 | 4 | 6.5 | 8 | 2.5 | 3 | 6 |
| | | | End Depth | 6.5 | 2 | 2 | 4.5 | 7 | 8.5 | 3 | 3.5 | 6.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/23/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/23/2014 | 9/23/2014 | 9/22/2014 | 9/22/2014 |
| | | | Parent Sample Code | | | GPEC-TP314A | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.06 U | 0.053 U | 0.057 U | 0.054 U | 0.061 U | 0.068 U | 0.062 U | 0.059 U | 0.063 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00479 U | 0.00426 U | 0.00455 U | 0.00432 U | 0.00484 U | 0.00543 U | 0.00499 U | 0.00473 U | 0.00503 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.06 U | 0.053 U | 0.057 U | 0.054 U | 0.061 U | 0.068 U | 0.062 U | 0.059 U | 0.063 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.021 U | 0.018 U | 0.019 U | 0.018 U | 0.02 U | 0.023 U | 0.021 U | 0.021 U | 0.021 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.021 U | 0.018 U | 0.019 U | 0.018 U | 0.02 U | 0.023 U | 0.021 U | 0.021 U | 0.021 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6470** | **7030** | **7270** | **6930** | **7990** | **7570** | **3760** | **7380** | **6280** |
| Antimony | 7440-36-0 | NE | NE | 0.687 U | 0.545 U | 0.63 U | 0.604 U | 0.651 U | 0.79 U | **4.02** | **3.62** | **1.15** |
| Arsenic | 7440-38-2 | 16 | 16 | **1.52** | **2.85** | **2.41** | **3.17** | **7.47** | **31.7** | **24.6** | **21.9** | **10.2** |
| Barium | 7440-39-3 | 10000 | 820 | **41.8** | **51.3** | **49.1** | **40.1** | **53.2** | **80.1** | **255** | **360** | **268** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.372 J** | **0.436 J** | **0.419 J** | **0.417 J** | **0.673** | **0.513 J** | **0.54 J** | **0.511 J** | **0.463 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.687 U | **0.21 J** | 0.63 U | **0.237 J** | **0.179 J** | **0.391 J** | **1.77** | **0.767** | **0.617 J** |
| Calcium | 7440-70-2 | NE | NE | **890** | **2550** | **2890** | **3490** | **3910** | **1430** | **4200** | **1970** | **4400** |
| Chromium | 7440-47-3 | NE | NE | **14.2** | **15.4** | **15.2** | **14.6** | **16.9** | **30.2** | **25.5** | **24.2** | **18** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.28 U | 1.09 UJ | 1.21 UJ | 1.13 UJ | 1.23 UJ | 1.46 U | 1.27 U | 1.28 U | 1.26 U |
| Cobalt | 7440-48-4 | NE | NE | **5.4** | **5.76** | **5.76** | **6.85** | **10.1** | **5.68** | **5.19** | **6.53** | **5.31** |
| Copper | 7440-50-8 | 10000 | 1720 | **14.5** | **41.1** | **25.9** | **53.2** | **35.8** | **154** | **715** | **265** | **179** |
| Iron | 7439-89-6 | NE | NE | **11400** | **17600** | **17600** | **19400** | **22300** | **14900** | **22900** | **21900** | **19100** |
| Lead | 7439-92-1 | 3900 | 450 | **10.6** | **82.7** | **55.6** | **81.3** | **80.1** | **198** | **570** | **547** | **405** |
| Magnesium | 7439-95-4 | NE | NE | **1970** | **1900** | **1950** | **2910** | **2170** | **2610** | **978** | **2000** | **1760** |
| Manganese | 7439-96-5 | 10000 | 2000 | **79.3** | **238** | **220** | **270** | **244** | **203** | **170** | **408** | **521** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.048 J** | **0.514** | **0.423** | **2.56 J** | **0.614** | **1.67** | **44 D** | **4.25** | **5.74** |
| Nickel | 7440-02-0 | 10000 | 130 | **9.55** | **12.2** | **11.2** | **13.7** | **19.3** | **13.9** | **32.7** | **18.4** | **14.8** |
| Potassium | 7440-09-7 | NE | NE | **1080** | **855** | **857** | **944** | **1180** | **1280** | **492** | **874** | **754** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.864** | **1.23** | **1.63** | **1.42** | **2.14** | **1.52** | **4.07** | **1.34** | **1.22** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.687 U | 0.545 U | 0.63 U | 0.604 U | 0.651 U | 0.79 U | **9** | **0.273 J** | **0.484 J** |
| Sodium | 7440-23-5 | NE | NE | **254** | **711** | **740** | **519** | **836** | **150** | **202** | **134** | **121** |
| Thallium | 7440-28-0 | NE | NE | 0.687 U | **0.396 J** | **0.225 J** | **0.207 J** | **0.29 J** | **0.292 J** | **0.458 J** | **0.544 J** | **0.212 J** |
| Vanadium | 7440-62-2 | NE | NE | **19.9** | **25.1** | **26.9** | **22.6** | **24.8** | **22.3** | **16.6** | **24.6** | **22.3** |
| Zinc | 7440-66-6 | 10000 | 2480 | **30** | **67.8** | **57.8** | **94.3** | **102** | **97.1** | **718** | **564** | **362** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.2 U | 2.7 U | 2.9 U | 3 U | 3.1 U | 3.6 U | 3.2 U | 3.2 U | 3.2 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **4310** | **5190** | **7080** | **10700** | **36600** | **32900** | **54700** | **21500** | **13900** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB301 | GPEC-SB302 | GPEC-SB302 | GPEC-SB302 | GPEC-SB302 | GPEC-SB306 | GPEC-SB306 | GPEC-SB306 | GPEC-SB/PZ-309 |
| | | | | Sample Name | GPEC-SB301 (5-5.5) | GPEC-SB302 | GPEC-SB302 (20-21) | GPEC-SB302 (74-75) | GPEC-SB505 (74-75) | GPEC-SB306 (5-5.5) | GPEC-SB306 (19-20) | GPEC-SB306 (74-75) | GPEC-SB/PZ309 (5-5.5) |
| | | | | Start Depth | 5 | 5 | 20 | 74 | 74 | 5 | 19 | 74 | 5 |
| | | | | End Depth | 5.5 | 5.5 | 21 | 75 | 75 | 5.5 | 20 | 75 | 5.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/11/2015 | 3/11/2015 | 7/23/2015 | 7/23/2015 | 7/23/2015 | 3/11/2015 | 7/21/2015 | 7/21/2015 | 3/3/2015 |
| | | | | Parent Sample Code | | | | | GPEC-SB-302 (74-75) | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | 0.00583 UJ | 0.00577 U | **0.011 J** | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Toluene | 108-88-3 | 1000 | 0.7 | | 0.00583 UJ | 0.00577 U | **0.00277 J** | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | | 0.00583 UJ | 0.00577 U | **0.015 J** | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | **129 D** | 0.00631 U | 0.00584 U |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | 0.012 UJ | 0.012 U | **0.02 J** | 0.013 UJ | 0.012 UJ | 0.013 UJ | **84.1 D** | **0.00646 DJ** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | | ND | ND | **0.04877** | ND | ND | ND | **213.1** | **0.00646** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 0.029 UJ | 0.029 U | 0.031 UJ | 0.032 UJ | 0.03 UJ | 0.031 UJ | 22.3 U | 0.032 U | 0.029 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 0.117 R | 0.115 U | 0.125 UJ | 0.129 UJ | 0.12 UJ | 0.125 R | 223 U | 0.126 U | 0.117 U |
| Acrylonitrile | 107-13-1 | NE | NE | | 0.117 UJ | 0.115 U | 0.125 UJ | 0.129 UJ | 0.12 UJ | 0.125 UJ | 223 U | 0.126 U | 0.117 U |
| Bromodichloromethane | 75-27-4 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Bromoform | 75-25-2 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.013 UJ | 0.013 UJ | 0.012 UJ | 0.00627 UJ | 11.1 U | 0.013 U | 0.00584 U |
| Bromomethane | 74-83-9 | NE | NE | | 0.012 UJ | 0.012 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.013 UJ | 11.1 U | 0.00631 U | 0.012 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | 0.00583 UJ | 0.00577 U | **0.00978 J** | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 0.023 R | 0.023 U | **0.316 J** | 0.026 UJ | 0.024 UJ | 0.025 R | 22.3 U | 0.025 U | 0.023 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | 0.00583 UJ | 0.00577 U | **0.00561 J** | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Chloroethane | 75-00-3 | NE | 1.9 | | 0.012 UJ | 0.012 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.013 UJ | 11.1 U | 0.00631 U | 0.012 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Chloroform | 67-66-3 | 700 | 0.37 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Chloromethane | 74-87-3 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Dibromochloromethane | 124-48-1 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Diisopropyl ether | 108-20-3 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 2-Hexanone | 591-78-6 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | 0.012 UJ | 0.012 U | **0.041 J** | **0.04 J** | **0.038 J** | 0.013 UJ | 22.3 U | **0.035 CD** | 0.012 U |
| Styrene | 100-42-5 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 0.00583 UJ | 0.00577 U | **0.016 J** | **0.019 J** | **0.02 J** | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Vinyl acetate | 108-05-4 | NE | NE | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 0.00583 UJ | 0.00577 U | 0.00624 UJ | 0.00643 UJ | 0.006 UJ | 0.00627 UJ | 11.1 U | 0.00631 U | 0.00584 U |
| Total VOCs | TVOC | NE | NE | | ND | ND | **0.43716** | **0.059** | **0.058** | ND | **213.1** | **0.04146** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | **1.07** | 0.037 U | 0.04 U | 0.043 U | 0.039 U | **0.561** | **53.2 D** | 0.041 U | **0.537** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | **0.256** | 0.037 U | 0.04 U | 0.043 U | 0.039 U | **0.235** | **1.16** | 0.041 U | **0.112** |
| Anthracene | 120-12-7 | 1000 | 1000 | | **2.47** | **0.07** | 0.04 U | 0.043 U | 0.039 U | **1.37** | **5.28** | 0.041 U | **1.04** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | **3.7** | **0.556** | 0.04 U | 0.043 U | 0.039 U | **4.36** | **0.847** | 0.041 U | **1.83** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | **12.3** | **0.719** | 0.04 U | 0.043 U | 0.039 U | **11.2** | **7.07 D** | 0.041 U | **5.71** |
| Fluorene | 86-73-7 | 1000 | 386 | | **0.859** | 0.037 U | 0.04 U | 0.043 U | 0.039 U | **0.561** | **16.4 D** | 0.041 U | **0.374** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | **0.232** | 0.037 U | 0.04 U | 0.043 U | **0.034 J** | **0.514** | **146 D** | 0.041 U | **0.118** |
| Naphthalene | 91-20-3 | 1000 | 12 | | **0.338** | **0.033 J** | **0.071** | **0.034 J** | **0.093** | **0.562** | **1130 D** | **0.066** | **0.199** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | **11.5** | **0.35** | 0.04 U | 0.043 U | 0.039 U | **7.68** | **22 D** | 0.041 U | **4.12** |
| Pyrene | 129-00-0 | 1000 | 1000 | | **11.5** | **0.767** | 0.04 U | 0.043 U | 0.039 U | **9.81** | **4.99** | 0.041 U | **4.38** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | **5.39** | **0.503** | 0.04 U | 0.043 U | 0.039 U | **5.19** | **2.42** | 0.041 U | **2.67** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | **5.75** | **0.6** | 0.04 U | 0.043 U | 0.039 U | **6.58** | **1.52** | 0.041 U | **2.88** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | **4.93** | **0.823** | 0.04 U | 0.043 U | 0.039 U | **6.35** | **1.64** | 0.041 U | **2.81** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | **4.58** | **0.56** | 0.04 U | 0.043 U | 0.039 U | **4.38** | **1.17** | 0.041 U | **2.03** |
| Chrysene | 218-01-9 | 110 | 1 | | **5.64** | **0.632** | 0.04 U | 0.043 U | 0.039 U | **6.21** | **2.27** | 0.041 U | **2.75** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | **1.12** | **0.195** | 0.04 U | 0.043 U | 0.039 U | **1.47** | **0.322** | 0.041 U | **0.633** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | **2.98** | **0.441** | 0.04 U | 0.043 U | 0.039 U | **3.56** | **0.874** | 0.041 U | **1.67** |
| Total PAHs | TPAH | NE | NE | | **74.615** | **6.249** | **0.071** | **0.034** | **0.127** | **70.593** | **1397.163** | **0.066** | **33.863** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB301** | **GPEC-SB302** | **GPEC-SB302** | **GPEC-SB302** | **GPEC-SB302** | **GPEC-SB306** | **GPEC-SB306** | **GPEC-SB306** | **GPEC-SB/PZ-309** |
| **Sample Name** | | | | **GPEC-SB301 (5-5.5)** | **GPEC-SB302** | **GPEC-SB302 (20-21)** | **GPEC-SB302 (74-75)** | **GPEC-SB505 (74-75)** | **GPEC-SB306 (5-5.5)** | **GPEC-SB306 (19-20)** | **GPEC-SB306 (74-75)** | **GPEC-SB/PZ309 (5-5.5)** |
| **Start Depth** | | | | **5** | **5** | **20** | **74** | **74** | **5** | **19** | **74** | **5** |
| **End Depth** | | | | **5.5** | **5.5** | **21** | **75** | **75** | **5.5** | **20** | **75** | **5.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/11/2015** | **3/11/2015** | **7/23/2015** | **7/23/2015** | **7/23/2015** | **3/11/2015** | **7/21/2015** | **7/21/2015** | **3/3/2015** |
| Parent Sample Code | | | | | | | | GPEC-SB-302 (74-75) | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.473** | **0.77** | 0.04 U | 0.043 U | 0.039 U | **0.365** | 0.036 U | 0.041 U | **0.255** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Carbazole | 86-74-8 | NE | NE | **0.921** | **0.028 J** | 0.04 U | 0.043 U | 0.039 U | **0.446** | 0.036 U | 0.041 U | **0.376** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.578** | 0.037 U | 0.04 U | 0.043 U | 0.039 U | **0.413** | **17 D** | 0.041 U | **0.186** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.113 U | 0.037 U | 0.404 U | 0.428 U | 0.395 U | 0.081 U | 0.359 U | 0.409 U | 0.074 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.113 U | 0.037 U | 0.404 U | 0.428 U | 0.395 U | 0.081 U | 0.359 U | 0.409 U | 0.074 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.113 U | 0.037 U | 0.404 U | 0.428 U | 0.395 U | 0.081 U | 0.359 U | 0.409 U | 0.074 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Pyridine | 110-86-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.113 U | 0.037 U | 0.04 U | 0.043 U | 0.039 U | 0.081 U | 0.036 U | 0.041 U | 0.074 U |
| Total SVOCs | TSVOC | NE | NE | **76.587** | **7.047** | **0.071** | **0.034** | **0.127** | **71.817** | **1414.163** | **0.066** | **34.68** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.022 U | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.207 U | 0.023 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB301 | GPEC-SB302 | GPEC-SB302 | GPEC-SB302 | GPEC-SB302 | GPEC-SB306 | GPEC-SB306 | GPEC-SB306 | GPEC-SB306 | GPEC-SB/PZ-309 |
| | | | Sample Name | GPEC-SB301 (5-5.5) | GPEC-SB302 | GPEC-SB302 (20-21) | GPEC-SB302 (74-75) | GPEC-SB505 (74-75) | GPEC-SB306 (5-5.5) | GPEC-SB306 (19-20) | GPEC-SB306 (74-75) | GPEC-SB/PZ309 (5-5.5) |
| | | | Start Depth | 5 | 5 | 20 | 74 | 74 | 5 | 19 | 74 | 5 |
| | | | End Depth | 5.5 | 5.5 | 21 | 75 | 75 | 5.5 | 20 | 75 | 5.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/11/2015 | 3/11/2015 | 7/23/2015 | 7/23/2015 | 7/23/2015 | 3/11/2015 | 7/21/2015 | 7/21/2015 | 3/3/2015 |
| | | | Parent Sample Code | | | | | GPEC-SB-302 (74-75) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.055 U | 0.055 U | NA | NA | NA | 0.061 U | NA | NA | 0.058 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.00907** | 0.00442 U | NA | NA | NA | **0.00673** | NA | NA | 0.00464 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00439 U | 0.00442 U | NA | NA | NA | 0.00488 U | NA | NA | 0.00464 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.055 U | 0.055 U | NA | NA | NA | 0.061 U | NA | NA | 0.058 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | 0.018 U | NA | NA | NA | 0.02 U | NA | NA | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | 0.018 U | NA | NA | NA | 0.02 U | NA | NA | 0.019 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **10900** | **6280** | **6410** | **3210** | **3130** | **7920** | **3280** | **2620** | **10600** |
| Antimony | 7440-36-0 | NE | NE | **0.803** | **1.8** | 0.668 U | 0.645 U | 0.638 U | **1.23** | 0.593 U | 0.682 U | **23.9** |
| Arsenic | 7440-38-2 | 16 | 16 | **5.02** | **12.1** | **1.41** | **1.01** | **1.23** | **19.8** | **1.55** | 0.682 U | **11.4** |
| Barium | 7440-39-3 | 10000 | 820 | **110** | **138** | **20.1** | **15.1** | **14.4** | **296** | **14.7** | **10.2** | **297** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.714** | **0.507 J** | **0.284 J** | 0.645 U | 0.638 U | **0.558 J** | 0.593 U | 0.682 U | **0.588 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.365 J** | **0.445 J** | 0.668 U | 0.645 U | 0.638 U | **0.539 J** | 0.593 U | 0.682 U | **1.56** |
| Calcium | 7440-70-2 | NE | NE | **4900** | **24900** | **1850** | **8290** | **8720** | **10900** | **1390** | **9120** | **4810** |
| Chromium | 7440-47-3 | NE | NE | **19.1** | **23.4** | **10.7** | **8.05** | **7.37** | **29** | **9.37** | **5.46** | **33.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **1.88 J** | 1.15 U | 1.25 U | 1.29 U | 1.2 U | 1.25 UJ | 1.11 U | 1.26 U | 1.17 U |
| Cobalt | 7440-48-4 | NE | NE | **5.94** | **5.99** | **4.67** | **3.09** | **3.3** | **7.12** | **3.75** | **1.89** | **8.35** |
| Copper | 7440-50-8 | 10000 | 1720 | **62.6** | **124** | **7.13** | **7.12** | **7.13** | **96.5** | **9.44** | **5.93** | **272** |
| Iron | 7439-89-6 | NE | NE | **17900** | **24000** | **8520** | **10600** | **12200** | **23600** | **10300** | **6470** | **27100** |
| Lead | 7439-92-1 | 3900 | 450 | **249** | **223** | **8.32** | **2.04** | **2.12** | **1440** | **4.13** | **1.21** | **597** |
| Magnesium | 7439-95-4 | NE | NE | **2930** | **2570** | **1700** | **5090** | **5130** | **2720** | **1450** | **4710** | **4650** |
| Manganese | 7439-96-5 | 10000 | 2000 | **305** | **350** | **106** | **115** | **132** | **270** | **379** | **144** | **584** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.501** | **1.34** | **0.081** | 0.0081 U | 0.0072 U | **1.29** | **0.021** | **0.02** | **8.38 D** |
| Nickel | 7440-02-0 | 10000 | 130 | **16.9** | **16.8** | **7.96** | **6.38** | **6.66** | **17.1** | **8.7** | **4.4** | **34.4** |
| Potassium | 7440-09-7 | NE | NE | **1190** | **1080** | **453** | **691** | **599** | **1230** | **536** | **361** | **877** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.44** | **1.98** | **0.86** | 0.645 U | **0.868** | **3.11** | 0.593 U | 0.682 U | **2.11** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.614 U | 0.599 U | 0.668 U | 0.645 U | 0.638 U | **0.216 J** | 0.593 U | 0.682 U | **0.893** |
| Sodium | 7440-23-5 | NE | NE | **972** | **477** | **400** | **183** | **245** | **287** | **150** | **181** | **862** |
| Thallium | 7440-28-0 | NE | NE | **0.204 J** | 0.599 U | **0.306 J** | 0.645 U | 0.638 U | **0.186 J** | **0.279 J** | 0.682 U | **0.214 J** |
| Vanadium | 7440-62-2 | NE | NE | **25.9** | **29.5** | **14.1** | **14.1** | **16.4** | **35.2** | **12.6** | **10.6** | **31.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **156** | **178** | **35.8** | **16.5** | **18.5** | **396** | **26.9** | **7.95** | **842** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 2.9 U | 3.1 U | 3.2 U | 3 U | 3.1 U | 2.8 U | 3.2 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **6470** | **6740** | **14400** | **624 J** | 1000 U | **32600** | **835 J** | 1000 U | **32400** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB/PZ-309 | GPEC-SB/PZ-309 | GPEC-SB310 | GPEC-SB310 | GPEC-SB310 | GPEC-SB/PZ-311 | GPEC-SB311 | GPEC-SB311 |
| Sample Name | | | | GPEC-SB/PZ309 (8.5-9.5) | GPEC-SB/PZ309 (16-17) | GPEC-SB310 (5-5.5) | GPEC-SB310 (9-10) | GPEC-SB310 (13.5-14.5) | GPEC-SB/PZ311 | GPEC-SB311 (9-10) | GPEC-SB311 (22-23) |
| Start Depth | | | | 8.5 | 16 | 5 | 9 | 13.5 | 4.5 | 9 | 22 |
| End Depth | | | | 9.5 | 17 | 5.5 | 10 | 14.5 | 5 | 10 | 23 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 4/3/2015 | 4/3/2015 | 3/10/2015 | 4/7/2015 | 4/7/2015 | 3/12/2015 | 4/7/2015 | 4/7/2015 |
| Parent Sample Code | | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00597 U | **0.027 D** | 0.00607 UJ | **0.049 J** | **0.022 D** | **2.74** | **57.7 D** | **0.00292 DJ** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00597 U | **0.0085 DJ** | 0.00607 UJ | 0.12 U | 0.00887 U | **0.256** | **60.9 D** | **0.00305 DJ** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00597 U | 0.016 U | 0.00607 UJ | **0.072 J** | 0.00887 U | **1.03** | **46.5 D** | 0.0071 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.031 U | 0.012 UJ | 0.24 U | 0.018 U | **1.16** | **82.3 D** | 0.014 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.0355** | ND | **0.121** | **0.022** | **5.186** | **247.4** | **0.00597** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.03 U | 0.078 U | **0.061 J** | 0.24 U | 0.044 U | 0.23 U | 1.26 U | 0.036 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.119 U | 0.313 U | 0.121 R | 2.4 U | 0.177 U | 2.3 U | 12.6 U | 0.142 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.119 U | 0.313 U | 0.121 UJ | 2.4 U | 0.177 U | 2.3 U | 12.6 U | 0.142 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Bromoform | 75-25-2 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.24 U | 0.00887 U | 0.115 U | 1.26 U | 0.0071 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 0.031 U | 0.012 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00597 U | 0.016 U | **0.00982 J** | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.063 U | 0.024 R | 0.24 U | 0.036 U | 0.23 U | 1.26 U | 0.028 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | **0.075 D** | 0.115 U | 0.632 U | **0.032 D** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.018 U | 0.115 U | 0.632 U | 0.014 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.012 U | 0.031 U | 0.012 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.019 CD** | **0.05 CD** | 0.012 UJ | 0.24 U | 0.018 U | 0.23 U | 1.26 U | 0.014 U |
| Styrene | 100-42-5 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | **16.3 D** | 0.0071 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00597 U | 0.016 U | 0.00607 UJ | 0.12 U | 0.00887 U | 0.115 U | 0.632 U | 0.0071 U |
| Total VOCs | TVOC | NE | NE | **0.019** | **0.0855** | **0.07082** | **0.121** | **0.097** | **5.186** | **263.7** | **0.03797** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.096** | **0.287** | 0.04 U | **0.159** | **0.059** | **0.172** | **0.16 D** | 0.045 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | **0.095** | **0.373 D** | 0.045 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.278** | **0.271** | **0.029 J** | **0.376** | **0.122** | **0.258** | **0.149 D** | 0.045 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.379** | **0.639** | **0.16** | **0.225** | **0.22** | **0.425** | 0.083 U | 0.045 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **1.03** | **1.42** | **0.245** | **0.886** | **0.602** | **1.72** | **0.245 D** | 0.045 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.149** | **0.183** | 0.04 U | **0.219** | **0.067** | **0.174** | **0.3 D** | 0.045 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.071** | **0.268** | 0.04 U | **0.201** | **0.056 J** | **0.407** | **2.37 D** | 0.045 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.164** | **1.66** | **0.035 J** | **0.309** | **0.126** | **2.01** | **9.04 D** | **0.059** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.06** | **1.02** | **0.103** | **1.07** | **0.423** | **0.877** | **0.977 D** | 0.045 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.927** | **1.43** | **0.257** | **0.967** | **0.718** | **1.57** | **0.251 D** | 0.045 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.499** | **0.818** | **0.171** | **0.466** | **0.315** | **0.608** | **0.085 D** | 0.045 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.557** | **1.02** | **0.213** | **0.397** | **0.281** | **0.613** | **0.054 DJ** | 0.045 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.542** | **0.927** | **0.217** | **0.314** | **0.285** | **0.62** | **0.053 DJ** | 0.045 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.465** | **0.975** | **0.198** | **0.276** | **0.225** | **0.552** | 0.083 U | 0.045 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.51** | **1.06** | **0.189** | **0.474** | **0.385** | **0.694** | **0.09 D** | 0.045 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.096** | **0.261** | **0.053** | **0.056** | **0.045 J** | **0.129** | 0.083 U | 0.045 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.317** | **0.541** | **0.135** | **0.188** | **0.163** | **0.37** | 0.083 U | 0.045 U |
| Total PAHs | TPAH | NE | NE | **7.14** | **12.78** | **2.005** | **6.583** | **4.092** | **11.294** | **14.147** | **0.059** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB/PZ-309** | **GPEC-SB/PZ-309** | **GPEC-SB310** | **GPEC-SB310** | **GPEC-SB310** | **GPEC-SB/PZ-311** | **GPEC-SB311** | **GPEC-SB311** |
| **Sample Name** | | | | **GPEC-SB/PZ309 (8.5-9.5)** | **GPEC-SB/PZ309 (16-17)** | **GPEC-SB310 (5-5.5)** | **GPEC-SB310 (9-10)** | **GPEC-SB310 (13.5-14.5)** | **GPEC-SB/PZ311** | **GPEC-SB311 (9-10)** | **GPEC-SB311 (22-23)** |
| **Start Depth** | | | | **8.5** | **16** | **5** | **9** | **13.5** | **4.5** | **9** | **22** |
| **End Depth** | | | | **9.5** | **17** | **5.5** | **10** | **14.5** | **5** | **10** | **23** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/3/2015** | **4/3/2015** | **3/10/2015** | **4/7/2015** | **4/7/2015** | **3/12/2015** | **4/7/2015** | **4/7/2015** |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.241** | **0.069 J** | 0.04 U | **0.085** | 0.056 U | **0.099** | 0.083 U | 0.045 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | **0.106** | 0.04 U | **0.034 J** | 0.056 U | 0.038 U | **0.061 DJ** | 0.045 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.059** | **0.107** | 0.04 U | 0.039 U | **0.037 J** | **0.094** | **0.127 D** | 0.045 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | **0.433** | 0.04 U | 0.039 U | **0.095** | 0.038 U | 0.083 U | 0.045 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.103 U | 0.04 U | 0.039 U | 0.056 U | 0.038 U | 0.083 U | 0.045 U |
| Total SVOCs | TSVOC | NE | NE | **7.44** | **13.495** | **2.005** | **6.702** | **4.224** | **11.487** | **14.335** | **0.059** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.058 U | 0.023 U | 0.022 U | 0.067 U | 0.022 U | 0.024 U | 0.028 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-309 | GPEC-SB/PZ-309 | GPEC-SB310 | GPEC-SB310 | GPEC-SB310 | GPEC-SB/PZ-311 | GPEC-SB311 | GPEC-SB311 |
| | | | Sample Name | GPEC-SB/PZ309 (8.5-9.5) | GPEC-SB/PZ309 (16-17) | GPEC-SB310 (5-5.5) | GPEC-SB310 (9-10) | GPEC-SB310 (13.5-14.5) | GPEC-SB/PZ311 | GPEC-SB311 (9-10) | GPEC-SB311 (22-23) |
| | | | Start Depth | 8.5 | 16 | 5 | 9 | 13.5 | 4.5 | 9 | 22 |
| | | | End Depth | 9.5 | 17 | 5.5 | 10 | 14.5 | 5 | 10 | 23 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/3/2015 | 4/3/2015 | 3/10/2015 | 4/7/2015 | 4/7/2015 | 3/12/2015 | 4/7/2015 | 4/7/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.058 U | NA | NA | 0.055 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00467 U | NA | NA | 0.00439 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.058 U | NA | NA | 0.055 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.02 U | NA | NA | 0.019 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.02 U | NA | NA | 0.019 U | NA | NA |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **10700** | **19600** | **7630** | **15200** | **15500** | **5800** | **11800** | **14300** |
| Antimony | 7440-36-0 | NE | NE | **1.3** | **7.99** | **11.4** | **0.329 J** | **6.12** | **3.95** | 0.682 U | 0.743 U |
| Arsenic | 7440-38-2 | 16 | 16 | **9.8** | **38.1** | **5.21** | **3.77** | **46** | **6.97** | **5.74** | **6.99** |
| Barium | 7440-39-3 | 10000 | 820 | **84.6** | **190** | **93.3** | **95.3** | **94** | **156** | **46.7** | **51.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.564 J** | **0.979 J** | **0.539 J** | **0.693** | **0.708 J** | **0.5 J** | **0.933** | **0.939** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.323 J** | **0.991 J** | **0.239 J** | 0.622 U | **3.31** | **0.385 J** | 0.682 U | 0.743 U |
| Calcium | 7440-70-2 | NE | NE | **2050** | **9400** | **1330** | **3670** | **3650** | **3640** | **1320** | **2490** |
| Chromium | 7440-47-3 | NE | NE | **22.9** | **52.6** | **20.2** | **31.8** | **31.3** | **22.3** | **25.4** | **29.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 3.13 U | 1.21 UJ | 1.2 U | 1.77 U | 1.15 U | 1.26 U | 1.42 U |
| Cobalt | 7440-48-4 | NE | NE | **7.71** | **15.6** | **6.28** | **7.79** | **8.39** | **6.42** | **12.1** | **11.1** |
| Copper | 7440-50-8 | 10000 | 1720 | **41.5** | **598** | **67.8** | **23.6** | **561** | **103** | **22.1** | **17.9** |
| Iron | 7439-89-6 | NE | NE | **23800** | **51600** | **18600** | **29200** | **20700** | **19600** | **24800** | **32800** |
| Lead | 7439-92-1 | 3900 | 450 | **79.4** | **501** | **202** | **207** | **338** | **153** | **18.3** | **21.1** |
| Magnesium | 7439-95-4 | NE | NE | **2930** | **6680** | **2080** | **2730** | **3890** | **2390** | **2750** | **4350** |
| Manganese | 7439-96-5 | 10000 | 2000 | **543** | **1170** | **193** | **349** | **287** | **252** | **203** | **455** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.399** | **11.4** | **1.08** | **0.369** | **3.92** | **0.708** | **0.065** | **0.091** |
| Nickel | 7440-02-0 | 10000 | 130 | **16.6** | **41** | **13.6** | **15.2** | **25.5** | **17.5** | **22** | **22.5** |
| Potassium | 7440-09-7 | NE | NE | **1580** | **2510** | **961** | **1350** | **2190** | **1240** | **1830** | **2410** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.47** | **7.46** | **2.41** | **2.07** | **6.26** | **2.49** | **2.51** | **2.47** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.661 U | **1.04 J** | 0.649 U | 0.622 U | **1.65** | **0.402 J** | 0.682 U | 0.743 U |
| Sodium | 7440-23-5 | NE | NE | **240** | **2070** | **121** | **275** | **3330** | **371** | **462** | **2150** |
| Thallium | 7440-28-0 | NE | NE | **0.298 J** | **0.687 J** | **0.216 J** | **0.282 J** | **0.484 J** | 0.601 U | **0.183 J** | **0.207 J** |
| Vanadium | 7440-62-2 | NE | NE | **31.8** | **78.5** | **28.9** | **52.1** | **42.6** | **31** | **31.2** | **40.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **181** | **366** | **148** | **120** | **467** | **176** | **63.3** | **67.4** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 7.8 U | 3 U | 3 U | 4.4 U | 2.9 U | 3.2 U | 3.6 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **14000** | **142000** | **12200** | **4940** | **26900** | **15100** | **8590** | **13400** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-314 | GPEC-SB314 | GPEC-SB315 | GPEC-SB315 | GPEC-SB315 | GPEC-SB316 | GPEC-SB/PZ-316 | GPEC-SB/PZ-316 |
| | | | Sample Name | GPEC-SB/PZ314 | GPEC-SB314 (12-13) | GPEC-SB315 | GPEC-SB315 (22-23) | GPEC-SB315 (29-30) | GPEC-SB316 (4.5-5) | GPEC-SB/PZ316 (9-10) | GPEC-SB/PZ316 (14-15) |
| | | | Start Depth | 5 | 12 | 4 | 22 | 29 | 4.5 | 9 | 14 |
| | | | End Depth | 5.5 | 13 | 4.5 | 23 | 30 | 5 | 10 | 15 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/12/2015 | 4/7/2015 | 3/13/2015 | 4/8/2015 | 4/8/2015 | 5/5/2015 | 6/30/2015 | 6/30/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **0.00389 DJ** | **0.916 D** | **0.00519 DJ** | **0.303 DJ** | 0.124 U | **0.0064 D** | **0.167** | 5.85 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | **0.248** | **3.7 DJ** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0065 U | **0.435 D** | **0.00201 DJ** | **4.32 D** | 0.124 U | 0.00593 U | **1.19** | **62.5 D** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.013 U | 0.496 U | 0.011 U | **1.88 D** | 0.247 U | 0.012 U | **2.35** | **108 D** |
| Total BTEX | TBTEX | NE | NE | **0.00389** | **1.351** | **0.0072** | **6.503** | ND | **0.0064** | **3.955** | **174.2** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.033 U | 0.496 U | 0.028 U | 1.19 U | 0.247 U | 0.03 U | 0.121 U | 11.7 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.13 U | 4.96 U | 0.111 U | 11.9 U | 2.47 U | 0.119 U | 1.21 U | 117 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.13 U | 4.96 U | 0.111 U | 11.9 U | 2.47 U | 0.119 U | 1.21 U | 117 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Bromoform | 75-25-2 | NE | NE | 0.0065 U | 0.496 U | 0.00556 U | 1.19 U | 0.247 U | 0.00593 U | 0.06 U | 5.85 U |
| Bromomethane | 74-83-9 | NE | NE | 0.013 U | 0.248 U | 0.011 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.026 U | 0.496 U | 0.022 U | 1.19 U | 0.247 U | 0.024 U | 0.121 U | 11.7 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.012 U | 0.06 U | 5.85 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.013 U | 0.248 U | 0.011 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.121 U | 11.7 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.013 U | 0.496 U | **0.016 CD** | 1.19 U | 0.247 U | 0.012 U | 0.121 U | 11.7 U |
| Styrene | 100-42-5 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | **0.343** | **12.9 D** |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.121 U | 11.7 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | **0.05 J** | **6.64 D** |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.121 U | 11.7 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0065 U | 0.248 U | 0.00556 U | 0.596 U | 0.124 U | 0.00593 U | 0.06 U | 5.85 U |
| Total VOCs | TVOC | NE | NE | **0.00389** | **1.351** | **0.0232** | **6.503** | ND | **0.0064** | **4.348** | **193.74** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.173** | **6.38 D** | **0.321 D** | **12.1 D** | **0.104** | **0.38** | **0.366** | **0.212 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.11** | **0.35 D** | **0.665 D** | **0.435 D** | 0.041 U | **0.099** | **0.107** | **0.755 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.479** | **0.959 D** | **1.14 D** | **1.85 D** | 0.041 U | **0.319** | **0.277** | 0.184 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.35** | **0.147 DJ** | **3.83 D** | **0.264 DJ** | 0.041 U | **0.618** | **0.363** | 0.184 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **2.96** | **1.09 D** | **9.09 D** | **2.7 D** | **0.027 J** | **2.02** | **1.32** | 0.184 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.175** | **2.83 D** | **0.328 D** | **4.14 D** | **0.037 J** | **0.119** | **0.471** | **0.201 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.082** | **12.8 D** | **0.329 D** | **39.7 D** | **0.295** | **0.133** | **0.297** | **8.2 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.275** | **30.5 D** | **1.57 D** | **97.4 D** | **0.874** | **0.888** | **2.1** | **43.8 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.99** | **5.25 D** | **3.89 D** | **9.82 D** | **0.1** | **0.611** | **0.728** | **0.313 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.16** | **1.17 D** | **7.51 D** | **2.53 D** | **0.034 J** | **2.27** | **1.59** | 0.184 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.67** | **0.446 D** | **4.62 D** | **0.841 D** | 0.041 U | **0.956** | **0.654** | 0.184 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.92** | **0.274 D** | **4.9 D** | **0.533 D** | 0.041 U | **1.09** | **0.502** | 0.184 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **2.03** | **0.253 D** | **5.2 D** | **0.465 D** | 0.041 U | **0.916** | **0.352** | 0.184 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.26** | **0.195 DJ** | **3.94 D** | **0.394 D** | 0.041 U | **0.667** | **0.385** | 0.184 U |
| Chrysene | 218-01-9 | 110 | 1 | **1.85** | **0.545 D** | **4.77 D** | **0.796 D** | 0.041 U | **1.03** | **0.735** | 0.184 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.427** | 0.199 U | **1.02 D** | 0.387 U | 0.041 U | **0.216** | **0.129** | 0.184 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.07** | 0.199 U | **3.18 D** | 0.387 U | 0.041 U | **0.537** | **0.289** | 0.184 U |
| Total PAHs | TPAH | NE | NE | **20.981** | **63.189** | **56.303** | **173.968** | **1.471** | **12.869** | **10.665** | **53.481** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB/PZ-314 | GPEC-SB314 | GPEC-SB315 | GPEC-SB315 | GPEC-SB315 | GPEC-SB316 | GPEC-SB/PZ-316 | GPEC-SB/PZ-316 |
| Sample Name | | | | GPEC-SB/PZ314 | GPEC-SB314 (12-13) | GPEC-SB315 | GPEC-SB315 (22-23) | GPEC-SB315 (29-30) | GPEC-SB316 (4.5-5) | GPEC-SB/PZ316 (9-10) | GPEC-SB/PZ316 (14-15) |
| Start Depth | | | | 5 | 12 | 4 | 22 | 29 | 4.5 | 9 | 14 |
| End Depth | | | | 5.5 | 13 | 4.5 | 23 | 30 | 5 | 10 | 15 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 3/12/2015 | 4/7/2015 | 3/13/2015 | 4/8/2015 | 4/8/2015 | 5/5/2015 | 6/30/2015 | 6/30/2015 |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.057** | 0.199 U | **0.292 D** | 0.387 U | **0.097** | **0.085** | **0.067** | 0.184 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Carbazole | 86-74-8 | NE | NE | **0.161** | **0.214 D** | **0.485 D** | **0.289 DJ** | 0.041 U | **0.044** | **0.142** | 0.184 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.105** | **2.09 D** | **0.297 D** | **2.98 D** | **0.025 J** | **0.075** | **0.194** | **0.272 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Pyridine | 110-86-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.043 U | 0.199 U | 0.109 U | 0.387 U | 0.041 U | 0.038 U | 0.039 U | 0.184 U |
| Total SVOCs | TSVOC | NE | NE | **21.304** | **65.493** | **57.377** | **177.237** | **1.593** | **13.073** | **11.068** | **53.753** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.025 U | 0.023 U | 0.041 U | 0.023 U | 0.024 U | 0.047 U | 0.024 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-314 | GPEC-SB314 | GPEC-SB315 | GPEC-SB315 | GPEC-SB315 | GPEC-SB316 | GPEC-SB/PZ-316 | GPEC-SB/PZ-316 |
| | | | Sample Name | GPEC-SB/PZ314 | GPEC-SB314 (12-13) | GPEC-SB315 | GPEC-SB315 (22-23) | GPEC-SB315 (29-30) | GPEC-SB316 (4.5-5) | GPEC-SB/PZ316 (9-10) | GPEC-SB/PZ316 (14-15) |
| | | | Start Depth | 5 | 12 | 4 | 22 | 29 | 4.5 | 9 | 14 |
| | | | End Depth | 5.5 | 13 | 4.5 | 23 | 30 | 5 | 10 | 15 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/12/2015 | 4/7/2015 | 3/13/2015 | 4/8/2015 | 4/8/2015 | 5/5/2015 | 6/30/2015 | 6/30/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.062 U | NA | 0.051 U | NA | NA | 0.058 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00497 U | NA | 0.00409 U | NA | NA | 0.00467 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.062 U | NA | 0.051 U | NA | NA | 0.058 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.021 U | NA | 0.018 U | NA | NA | 0.00975 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.021 U | NA | 0.018 U | NA | NA | 0.00975 U | NA | NA |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3330** | **7120** | **4670** | **3730** | **2910** | **9760** | **5650** | **6120** |
| Antimony | 7440-36-0 | NE | NE | **591** | **1.52** | **5.08** | 0.628 U | 0.662 U | **1.23** | **1.82** | 0.604 U |
| Arsenic | 7440-38-2 | 16 | 16 | **15.5** | **2.36** | **7.23** | **1.07** | **0.58 J** | **5.85** | **4.74** | **3.21** |
| Barium | 7440-39-3 | 10000 | 820 | **363** | **24.4** | **169** | **25.5** | **13.7** | **91.5** | **46.9** | **27.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.331 J** | **0.294 J** | **0.42 J** | 0.628 U | 0.662 U | **0.482 J** | 0.641 U | **0.459 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **2.11** | **0.181 J** | **0.661** | 0.628 U | 0.662 U | **0.234 J** | 0.641 U | **0.219 J** |
| Calcium | 7440-70-2 | NE | NE | **80500** | **1180** | **24500** | **1340** | **10500** | **6170** | **2730** | **1210** |
| Chromium | 7440-47-3 | NE | NE | **21.2** | **12.8** | **14.5** | **10.4** | **8.07** | **23.1** | **16.4** | **15.4** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.3 U | 1.24 U | 1.11 U | 1.19 U | 1.24 U | 1.19 U | 1.2 U | 1.16 U |
| Cobalt | 7440-48-4 | NE | NE | **5.6** | **4.02** | **4.57** | **3.86** | **2.91** | **7** | **4.63** | **11.4** |
| Copper | 7440-50-8 | 10000 | 1720 | **502** | **13** | **110** | **8.42** | **6.68** | **55.8** | **37.8** | **14.1** |
| Iron | 7439-89-6 | NE | NE | **17000** | **10700** | **13900** | **9360** | **7750** | **22800** | **14000** | **20900** |
| Lead | 7439-92-1 | 3900 | 450 | **835** | **27.7** | **170** | **3.27** | **2.61** | **162** | **96.1** | **9.88** |
| Magnesium | 7439-95-4 | NE | NE | **5080** | **1680** | **10800** | **1750** | **6160** | **2980** | **1570** | **1560** |
| Manganese | 7439-96-5 | 10000 | 2000 | **630** | **112** | **168** | **211** | **125** | **375** | **183** | **288** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **31.7 D** | **0.148** | **1.97** | 0.007 U | 0.0071 U | **0.922** | **0.377** | **0.028** |
| Nickel | 7440-02-0 | 10000 | 130 | **51** | **10.5** | **18.6** | **8.27** | **7.27** | **17.8** | **12.5** | **14.8** |
| Potassium | 7440-09-7 | NE | NE | **581** | **531** | **582** | **568** | **476** | **1140** | **626** | **833** |
| Selenium | 7782-49-2 | 6800 | 4 | **3.27** | **1.65** | **1.71** | **0.707** | **1.03** | **0.96** | **1.94** | **0.675** |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.1** | 0.671 U | **0.2 J** | 0.628 U | 0.662 U | 0.617 U | 0.641 U | 0.604 U |
| Sodium | 7440-23-5 | NE | NE | **895** | **502** | **1660** | **334** | **306** | **225** | **278** | **135** |
| Thallium | 7440-28-0 | NE | NE | **0.227 J** | 0.671 U | 0.576 U | 0.628 U | 0.662 U | **0.253 J** | **0.308 J** | **0.178 J** |
| Vanadium | 7440-62-2 | NE | NE | **18.5** | **16.7** | **25** | **13** | **12.2** | **35.1** | **16.5** | **25.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1050** | **49.8** | **220** | **78.5** | **18.1** | **115** | **73.2** | **43.2** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.3 U | 3.1 U | 2.8 U | 3 U | 3.1 U | 3 U | 3 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **23700** | **5350** | **13400** | **645 J** | **1640** | **22300** | **7030** | **1440** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB317 | GPEC-SB317 | GPEC-SB317 | GPEC-SB319 | GPEC-SB319 | GPEC-SB319 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 |
| | | | Sample Name | GPEC-SB317 | GPEC-SB317 (8.5-9.5) | GPEC-SB317 (12-13) | GPEC-SB319 (5-5.5) | GPEC-SB319 (14-15) | GPEC-SB319 (74-75) | GPEC-SB/PZ320 (5-5.5) | GPEC-SB/PZ320 (15-17) | GPEC-SB/PZ502 (15-17) |
| | | | Start Depth | 4 | 8.5 | 12 | 5 | 14 | 74 | 5 | 15 | 15 | |
| | | | End Depth | 4.5 | 9.5 | 13 | 5.5 | 15 | 75 | 5.5 | 17 | 17 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 3/13/2015 | 4/8/2015 | 4/8/2015 | 3/9/2015 | 7/9/2015 | 7/9/2015 | 3/3/2015 | 4/3/2015 | 4/3/2015 | |
| | | | Parent Sample Code | | | | | | | | | GPEC-SB/PZ-320 (15-17) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **1.61** | **64.7 D** | **144 D** | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | **0.00424 DJ** | |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.218** | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.234** | **31.3 D** | **22.4 D** | 0.00672 UJ | **0.00475 DJ** | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **0.225 J** | **5.23 D** | **30.6 D** | 0.013 UJ | **0.00677 DJ** | 0.012 U | 0.014 U | 0.026 U | 0.026 U | |
| Total BTEX | TBTEX | NE | NE | **2.287** | **101.23** | **197** | ND | **0.01152** | ND | ND | ND | **0.00424** | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.227 U | 4.67 U | 1.16 U | 0.034 UJ | 0.03 U | 0.031 U | 0.035 U | 0.065 U | 0.066 U | |
| Acrolein (propenal) | 107-02-8 | NE | NE | 2.27 U | 46.7 U | 11.6 U | 0.134 R | 0.118 U | 0.122 U | 0.139 U | 0.258 U | 0.263 U | |
| Acrylonitrile | 107-13-1 | NE | NE | 2.27 U | 46.7 U | 11.6 U | 0.134 UJ | 0.118 U | 0.122 U | 0.139 U | 0.258 U | 0.263 U | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Bromoform | 75-25-2 | NE | NE | 0.113 U | 4.67 U | 1.16 U | 0.00672 UJ | 0.012 U | 0.012 U | 0.00695 U | 0.013 U | 0.013 U | |
| Bromomethane | 74-83-9 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.013 UJ | 0.00589 U | 0.00609 U | 0.014 U | 0.026 U | 0.026 U | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.227 U | 4.67 U | 1.16 U | 0.027 R | 0.024 U | 0.024 U | 0.028 U | 0.052 U | 0.053 U | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | **0.088 D** | **0.052 D** | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.113 U | 2.34 U | 0.579 U | 0.013 UJ | 0.00589 U | 0.00609 U | 0.014 U | 0.026 U | 0.026 U | |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Chloromethane | 74-87-3 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.227 U | 4.67 U | 1.16 U | 0.013 UJ | **0.014 CD** | **0.014 CD** | 0.014 U | **0.073 CD** | **0.069 CD** | |
| Styrene | 100-42-5 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Vinyl acetate | 108-05-4 | NE | NE | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.113 U | 2.34 U | 0.579 U | 0.00672 UJ | 0.00589 U | 0.00609 U | 0.00695 U | 0.013 U | 0.013 U | |
| Total VOCs | TVOC | NE | NE | **2.287** | **101.23** | **197** | ND | **0.02552** | **0.014** | ND | **0.161** | **0.12524** | |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.49** | **32.3 D** | **19.7 D** | **0.042 J** | 0.038 U | 0.041 U | **0.087** | 0.086 U | 0.084 U | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.037 U | **1.19 D** | 0.57 U | **0.113** | 0.038 U | 0.041 U | **0.101** | 0.086 U | 0.084 U | |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.349** | **6.28 D** | **3.02 D** | **0.091** | 0.038 U | 0.041 U | **0.378** | 0.086 U | 0.084 U | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.597** | **1.57 D** | **0.458 DJ** | **0.529** | 0.038 U | 0.041 U | **0.974** | 0.086 U | 0.084 U | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.935** | **10.4 D** | **3.39 D** | **0.653** | **0.046** | 0.041 U | **2.51** | **0.055 J** | **0.134** | |
| Fluorene | 86-73-7 | 1000 | 386 | **0.245** | **13.4 D** | **8.06 D** | **0.051** | 0.038 U | 0.041 U | **0.124** | 0.086 U | 0.084 U | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.569** | **62.6 D** | **40.8 D** | **1.81** | **0.041** | 0.041 U | **0.077** | **0.092** | **0.212** | |
| Naphthalene | 91-20-3 | 1000 | 12 | **2.29** | **221 D** | **149 D** | **4.05** | **1.46** | 0.041 U | **0.687** | **0.242** | **0.539** | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.811** | **25.9 D** | **10.3 D** | **0.429** | **0.043** | 0.041 U | **1.64** | **0.057 J** | **0.13** | |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.962** | **8.32 D** | **2.66 D** | **0.507** | **0.04** | 0.041 U | **2.02** | **0.053 J** | **0.138** | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.459** | **3.69 D** | **1.32 D** | **0.356** | 0.038 U | 0.041 U | **1.22** | 0.086 U | **0.082 J** | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.623** | **2.86 D** | **0.959 D** | **0.49** | 0.038 U | 0.041 U | **1.33** | 0.086 U | **0.091** | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.66** | **2.62 D** | **1.05 D** | **0.545** | 0.038 U | 0.041 U | **1.22** | 0.086 U | **0.06 J** | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.46** | **2.15 D** | **0.705 D** | **0.337** | 0.038 U | 0.041 U | **1.03** | 0.086 U | **0.099** | |
| Chrysene | 218-01-9 | 110 | 1 | **0.536** | **3.81 D** | **1.19 D** | **0.403** | **0.025 J** | 0.041 U | **1.34** | 0.086 U | **0.088** | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.158** | **0.479 DJ** | 0.57 U | **0.153** | 0.038 U | 0.041 U | **0.327** | 0.086 U | 0.084 U | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.497** | **1.45 D** | 0.57 U | **0.408** | 0.038 U | 0.041 U | **0.829** | 0.086 U | 0.084 U | |
| Total PAHs | TPAH | NE | NE | **10.641** | **400.019** | **242.612** | **10.967** | **1.655** | ND | **15.894** | **0.499** | **1.573** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB317 | GPEC-SB317 | GPEC-SB317 | GPEC-SB319 | GPEC-SB319 | GPEC-SB319 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 |
| | | | Sample Name | GPEC-SB317 | GPEC-SB317 (8.5-9.5) | GPEC-SB317 (12-13) | GPEC-SB319 (5-5.5) | GPEC-SB319 (14-15) | GPEC-SB319 (74-75) | GPEC-SB/PZ320 (5-5.5) | GPEC-SB/PZ320 (15-17) | GPEC-SB/PZ502 (15-17) |
| | | | Start Depth | 4 | 8.5 | 12 | 5 | 14 | 74 | 5 | 15 | 15 |
| | | | End Depth | 4.5 | 9.5 | 13 | 5.5 | 15 | 75 | 5.5 | 17 | 17 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/13/2015 | 4/8/2015 | 4/8/2015 | 3/9/2015 | 7/9/2015 | 7/9/2015 | 3/3/2015 | 4/3/2015 | 4/3/2015 |
| | | | Parent Sample Code | | | | | | | | | GPEC-SB/PZ-320 (15-17) |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.552** | **0.525 DJ** | 0.57 U | **0.217** | 0.038 U | **0.041 J** | **0.76** | **0.098** | **0.106** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Carbazole | 86-74-8 | NE | NE | 0.037 U | **1.56 D** | **0.728 D** | **0.037 J** | 0.038 U | 0.041 U | **0.09** | 0.086 U | 0.084 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.199** | **10.2 D** | **7.35 D** | **0.083** | 0.038 U | 0.041 U | **0.076** | 0.086 U | 0.084 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Pyridine | 110-86-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.037 U | 0.739 U | 0.57 U | 0.043 U | 0.038 U | 0.041 U | 0.046 U | 0.086 U | 0.084 U |
| Total SVOCs | TSVOC | NE | NE | **11.392** | **412.304** | **250.69** | **11.304** | **1.655** | **0.041** | **16.82** | **0.597** | **1.679** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.043 U | 0.043 U | 0.021 U | 0.026 U | 0.022 U | 0.024 U | 0.028 U | 0.05 U | 0.052 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB317 | GPEC-SB317 | GPEC-SB317 | GPEC-SB319 | GPEC-SB319 | GPEC-SB319 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 | GPEC-SB/PZ-320 |
| | | | | Sample Name | GPEC-SB317 | GPEC-SB317 (8.5-9.5) | GPEC-SB317 (12-13) | GPEC-SB319 (5-5.5) | GPEC-SB319 (14-15) | GPEC-SB319 (74-75) | GPEC-SB/PZ320 (5-5.5) | GPEC-SB/PZ320 (15-17) | GPEC-SB/PZ502 (15-17) |
| | | | | Start Depth | 4 | 8.5 | 12 | 5 | 14 | 74 | 5 | 15 | 15 |
| | | | | End Depth | 4.5 | 9.5 | 13 | 5.5 | 15 | 75 | 5.5 | 17 | 17 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/13/2015 | 4/8/2015 | 4/8/2015 | 3/9/2015 | 7/9/2015 | 7/9/2015 | 3/3/2015 | 4/3/2015 | 4/3/2015 |
| | | | | Parent Sample Code | | | | | | | | | GPEC-SB/PZ-320 (15-17) |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.054 U | NA | NA | 0.065 U | NA | NA | 0.069 U | NA | NA | |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00428 U | NA | NA | 0.00521 U | NA | NA | 0.0055 U | NA | NA | |
| Toxaphene | 8001-35-2 | NE | NE | 0.054 U | NA | NA | 0.065 U | NA | NA | 0.069 U | NA | NA | |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | NA | 0.021 U | NA | NA | 0.022 U | NA | NA | |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | NA | 0.021 U | NA | NA | 0.022 U | NA | NA | |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4590** | **6350** | **9360** | **5280** | **8320** | **14100** | **4550** | **16900** | **12100** | |
| Antimony | 7440-36-0 | NE | NE | **2.07** | **0.451 J** | 0.604 U | **17.8** | 0.633 U | 0.61 U | **231** | **22.5** | **11.1** | |
| Arsenic | 7440-38-2 | 16 | 16 | **9.28** | **2.72** | **2.17** | **14.2** | **3.04** | **1.89** | **133** | **22.8** | **11** | |
| Barium | 7440-39-3 | 10000 | 820 | **69.9** | **42** | **38.4** | **1330** | **40** | **139** | **817** | **271** | **117** | |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.607** | **0.303 J** | **0.422 J** | **1.43** | **0.556 J** | **0.617** | **0.467 J** | **0.71 J** | **0.636 J** | |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.46** | **0.215 J** | 0.604 U | **1.48** | 0.633 U | 0.61 U | **3.68** | **2.14** | **0.791 J** | |
| Calcium | 7440-70-2 | NE | NE | **33500** | **15300** | **1230** | **14700** | **1510** | **10700** | **16700** | **38400** | **9760** | |
| Chromium | 7440-47-3 | NE | NE | **15.1** | **15.5** | **19.3** | **22.5** | **20.7** | **33.1** | **251** | **73** | **36.9** | |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.13 U | 1.17 U | 1.16 U | 1.34 UJ | 1.18 U | 1.21 U | 1.39 U | 2.58 U | 2.63 U | |
| Cobalt | 7440-48-4 | NE | NE | **7.72** | **4.94** | **9.5** | **6.46** | **7.15** | **9.48** | **46.9** | **10.9** | **7.41** | |
| Copper | 7440-50-8 | 10000 | 1720 | **131** | **25.5** | **15.5** | **215** | **18.9** | **19.3** | **2750** | **377** | **462** | |
| Iron | 7439-89-6 | NE | NE | **15900** | **13400** | **15600** | **23600** | **21400** | **23200** | **337000 D** | **57300** | **39500** | |
| Lead | 7439-92-1 | 3900 | 450 | **120** | **22.4** | **5.98** | **12300** | **14.5** | **6.39** | **16700** | **1260** | **497** | |
| Magnesium | 7439-95-4 | NE | NE | **14100** | **3810** | **2640** | **6450** | **2200** | **10500** | **2440** | **6590** | **5050** | |
| Manganese | 7439-96-5 | 10000 | 2000 | **219** | **294** | **178** | **999** | **481** | **421** | **1350** | **655** | **396** | |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.06** | **0.107** | 0.0068 U | **1.07** | **0.049** | **0.021** | **5.77 D** | **0.795** | **0.233** | |
| Nickel | 7440-02-0 | 10000 | 130 | **24.7** | **12.7** | **14.5** | **29.1** | **13.9** | **25.9** | **130** | **47.5** | **30.4** | |
| Potassium | 7440-09-7 | NE | NE | **760** | **898** | **1000** | **1010** | **1100** | **4640** | **604** | **3540** | **3600** | |
| Selenium | 7782-49-2 | 6800 | 4 | **2.2** | **1.46** | **1.3** | **3.11** | **0.69** | **1.67** | **2.15** | **3.24** | **1.91** | |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.236 J** | 0.62 U | 0.604 U | **0.471 J** | 0.633 U | 0.61 U | **4.63** | **0.929 J** | **0.581 J** | |
| Sodium | 7440-23-5 | NE | NE | **1570** | **847** | **536** | **669** | **175** | **790** | **502** | **3310** | **4350** | |
| Thallium | 7440-28-0 | NE | NE | **0.152 J** | 0.62 U | 0.604 U | **0.297 J** | **0.372 J** | **0.183 J** | **0.24 J** | **2.76** | **0.666 J** | |
| Vanadium | 7440-62-2 | NE | NE | **26.9** | **25.2** | **28.4** | **31.4** | **31.7** | **40** | **228** | **266** | **78.5** | |
| Zinc | 7440-66-6 | 10000 | 2480 | **526** | **64.7** | **26.5** | **2700** | **41.8** | **50.9** | **1610** | **723** | **306** | |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.9 U | 2.9 U | 3.4 U | 2.9 U | 3 U | 3.5 U | 6.5 U | 6.6 U | |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Organic Carbon | TOC | NE | NE | **19400** | **2900** | **1510** | **43900** | **740 J** | **593 J** | **31500** | **82200** | **63000** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB321 | GPEC-SB321 | GPEC-SB321 | GPEC-SB/PZ-322 | GPEC-SB/PZ-322 | GPEC-SB/PZ-322 | GPEC-SB/PZ-323 | GPEC-SB/PZ-323 | GPEC-SB/PZ-323 |
| | | | | Sample Name | GPEC-SB321 (1-1.5) | GPEC-SB321 (12-13) | GPEC-SB321 (29-30) | GPEC-SB/PZ322 (5-5.5) | GPEC-SB/PZ322 (13.5-14.5) | GPEC-SB/PZ322 (29-30) | GPEC-SB/PZ323 (5-5.5) | GPEC-SB/PZ323 (13.5-14.5) | GPEC-SB/PZ323 (29-30) |
| | | | | Start Depth | 1 | 12 | 29 | 5 | 13.5 | 29 | 5 | 13.5 | 29 |
| | | | | End Depth | 1.5 | 13 | 30 | 5.5 | 14.5 | 30 | 5.5 | 14.5 | 30 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/16/2015 | 4/9/2015 | 4/9/2015 | 3/24/2015 | 4/9/2015 | 4/9/2015 | 3/16/2015 | 4/9/2015 | 4/9/2015 |
| | | | | Parent Sample Code | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | **0.165 DJ** | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Toluene | 108-88-3 | 1000 | 0.7 | | **0.113 DJ** | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | 0.466 U | 0.012 U | 0.012 U | 0.012 U | 0.011 U | 0.011 U | 0.011 U | 0.025 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | | **0.278** | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 0.466 U | 0.03 U | 0.029 U | 0.029 U | 0.028 U | 0.028 U | 0.028 U | 0.062 U | 0.03 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 4.66 U | 0.122 U | 0.117 U | 0.117 U | 0.111 U | 0.11 U | 0.113 U | 0.246 U | 0.119 U |
| Acrylonitrile | 107-13-1 | NE | NE | | 4.66 U | 0.122 U | 0.117 U | 0.117 U | 0.111 U | 0.11 U | 0.113 U | 0.246 U | 0.119 U |
| Bromodichloromethane | 75-27-4 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Bromoform | 75-25-2 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Bromomethane | 74-83-9 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.012 U | 0.00557 U | 0.00552 U | 0.011 U | 0.012 U | 0.00597 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 0.466 U | 0.024 U | 0.023 U | 0.023 U | 0.022 U | 0.022 U | 0.023 U | 0.049 U | 0.024 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 0.233 U | 0.012 U | 0.012 U | 0.00586 U | 0.011 U | 0.011 U | 0.00566 U | 0.025 U | 0.012 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Chloroethane | 75-00-3 | NE | 1.9 | | 0.233 U | 0.00608 U | 0.00586 U | 0.012 U | 0.00557 U | 0.00552 U | 0.011 U | 0.012 U | 0.00597 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Chloroform | 67-66-3 | 700 | 0.37 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Chloromethane | 74-87-3 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Dibromochloromethane | 124-48-1 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 0.233 U | 0.00608 U | 0.00586 U | **0.00489 DJ** | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Diisopropyl ether | 108-20-3 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 2-Hexanone | 591-78-6 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | 0.466 U | **0.019 CD** | **0.014 CD** | **0.02 CD** | **0.036 CD** | **0.035 CD** | **0.015 CD** | 0.025 U | **0.037 CD** |
| Styrene | 100-42-5 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 0.233 U | 0.00608 U | 0.00586 U | **0.00575 DJ** | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Vinyl acetate | 108-05-4 | NE | NE | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 0.233 U | 0.00608 U | 0.00586 U | 0.00586 U | 0.00557 U | 0.00552 U | 0.00566 U | 0.012 U | 0.00597 U |
| Total VOCs | TVOC | NE | NE | | **0.278** | **0.019** | **0.014** | **0.03064** | **0.036** | **0.035** | **0.015** | ND | **0.037** |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | **0.827 D** | **0.032 J** | 0.038 U | **0.913 D** | 0.037 U | 0.036 U | **0.093** | 0.041 U | 0.039 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | **5.3 D** | 0.041 U | 0.038 U | **0.397 D** | 0.037 U | 0.036 U | **0.469** | 0.041 U | 0.039 U |
| Anthracene | 120-12-7 | 1000 | 1000 | | **6.6 D** | **0.095** | 0.038 U | **3.6 D** | 0.037 U | 0.036 U | **0.437** | **0.031 J** | 0.039 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | **8.66 D** | **0.186** | 0.038 U | **4.26 D** | 0.037 U | 0.036 U | **1.71** | **0.075** | 0.039 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | **30.6 D** | **0.658** | 0.038 U | **17.7 D** | 0.037 U | 0.036 U | **4.01** | **0.204** | **0.029 J** |
| Fluorene | 86-73-7 | 1000 | 386 | | **6.22 D** | **0.03 J** | 0.038 U | **0.998 D** | 0.037 U | 0.036 U | **0.1** | 0.041 U | 0.039 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | **2.09 D** | 0.041 U | 0.038 U | **0.741 D** | 0.037 U | 0.036 U | **0.062** | 0.041 U | 0.039 U |
| Naphthalene | 91-20-3 | 1000 | 12 | | **12.9 D** | 0.041 U | 0.038 U | **0.919 D** | 0.037 U | 0.036 U | **0.124** | 0.041 U | 0.039 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | **27.3 D** | **0.458** | 0.038 U | **14.3 D** | 0.037 U | 0.036 U | **1.59** | **0.125** | 0.039 U |
| Pyrene | 129-00-0 | 1000 | 1000 | | **20.3 D** | **0.615** | 0.038 U | **12.2 D** | 0.037 U | 0.036 U | **3.09** | **0.199** | **0.029 J** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | **11.8 D** | **0.335** | 0.038 U | **8.04 D** | 0.037 U | 0.036 U | **2.42** | **0.11** | 0.039 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | **13.1 D** | **0.288** | 0.038 U | **9.13 D** | 0.037 U | 0.036 U | **2.61** | **0.095** | 0.039 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | **13.1 D** | **0.291** | 0.038 U | **9.08 D** | 0.037 U | 0.036 U | **2.57** | **0.099** | 0.039 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | **9.43 D** | **0.256** | 0.038 U | **6.83 D** | 0.037 U | 0.036 U | **2.32** | **0.067** | 0.039 U |
| Chrysene | 218-01-9 | 110 | 1 | | **10.7 D** | **0.387** | 0.038 U | **7.49 D** | 0.037 U | 0.036 U | **2.38** | **0.103** | 0.039 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | **2.3 D** | **0.052** | 0.038 U | **1.56 D** | 0.037 U | 0.036 U | **0.504** | 0.041 U | 0.039 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | **7.47 D** | **0.163** | 0.038 U | **4.31 D** | 0.037 U | 0.036 U | **1.55** | **0.058** | 0.039 U |
| Total PAHs | TPAH | NE | NE | | **188.697** | **3.846** | ND | **102.468** | ND | ND | **26.039** | **1.166** | **0.058** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB321 | GPEC-SB321 | GPEC-SB321 | GPEC-SB/PZ-322 | GPEC-SB/PZ-322 | GPEC-SB/PZ-322 | GPEC-SB/PZ-323 | GPEC-SB/PZ-323 | GPEC-SB/PZ-323 |
| | | | Sample Name | GPEC-SB321 (1-1.5) | GPEC-SB321 (12-13) | GPEC-SB321 (29-30) | GPEC-SB/PZ322 (5-5.5) | GPEC-SB/PZ322 (13.5-14.5) | GPEC-SB/PZ322 (29-30) | GPEC-SB/PZ323 (5-5.5) | GPEC-SB/PZ323 (13.5-14.5) | GPEC-SB/PZ323 (29-30) |
| | | | Start Depth | 1 | 12 | 29 | 5 | 13.5 | 29 | 5 | 13.5 | 29 |
| | | | End Depth | 1.5 | 13 | 30 | 5.5 | 14.5 | 30 | 5.5 | 14.5 | 30 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/16/2015 | 4/9/2015 | 4/9/2015 | 3/24/2015 | 4/9/2015 | 4/9/2015 | 3/16/2015 | 4/9/2015 | 4/9/2015 |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.392 D** | **0.035 J** | 0.038 U | 0.155 U | **0.113** | 0.036 U | **0.156** | **0.143** | **0.236** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Carbazole | 86-74-8 | NE | NE | **3.44 D** | **0.058** | 0.038 U | **0.936 D** | 0.037 U | 0.036 U | **0.131** | 0.041 U | 0.039 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **3.95 D** | 0.041 U | 0.038 U | **0.995 D** | 0.037 U | 0.036 U | **0.087** | 0.041 U | 0.039 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Pyridine | 110-86-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.375 U | 0.041 U | 0.038 U | 0.155 U | 0.037 U | 0.036 U | 0.036 U | 0.041 U | 0.039 U |
| Total SVOCs | TSVOC | NE | NE | **196.479** | **3.939** | ND | **104.399** | **0.113** | ND | **26.413** | **1.309** | **0.294** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.109 U | 0.024 U | 0.022 U | 0.045 U | 0.021 U | 0.021 U | 0.022 U | 0.024 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** | **Area 4** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB321** | **GPEC-SB321** | **GPEC-SB321** | **GPEC-SB/PZ-322** | **GPEC-SB/PZ-322** | **GPEC-SB/PZ-322** | **GPEC-SB/PZ-323** | **GPEC-SB/PZ-323** | **GPEC-SB/PZ-323** |
| **Sample Name** | | | | **GPEC-SB321 (1-1.5)** | **GPEC-SB321 (12-13)** | **GPEC-SB321 (29-30)** | **GPEC-SB/PZ322 (5-5.5)** | **GPEC-SB/PZ322 (13.5-14.5)** | **GPEC-SB/PZ322 (29-30)** | **GPEC-SB/PZ323 (5-5.5)** | **GPEC-SB/PZ323 (13.5-14.5)** | **GPEC-SB/PZ323 (29-30)** |
| **Start Depth** | | | | **1** | **12** | **29** | **5** | **13.5** | **29** | **5** | **13.5** | **29** |
| **End Depth** | | | | **1.5** | **13** | **30** | **5.5** | **14.5** | **30** | **5.5** | **14.5** | **30** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/16/2015** | **4/9/2015** | **4/9/2015** | **3/24/2015** | **4/9/2015** | **4/9/2015** | **3/16/2015** | **4/9/2015** | **4/9/2015** |
| Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | **0.134** | NA | NA | 0.056 U | NA | NA | **0.066** | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | **0.017** | NA | NA | 0.00447 U | NA | NA | **0.00991** | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.00384 J** | NA | NA | **0.00526** | NA | NA | **0.00593** | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | **0.00854** | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | **0.00473** | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | **0.023** | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00434 U | NA | NA | 0.00447 U | NA | NA | 0.00446 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.054 U | NA | NA | 0.056 U | NA | NA | 0.056 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | NA | 0.019 U | NA | NA | 0.019 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | NA | 0.019 U | NA | NA | 0.019 U | NA | NA |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7620** | **5460** | **3160** | **5670** | **3770** | **3240** | **6520** | **3890** | **4350** |
| Antimony | 7440-36-0 | NE | NE | **1.34** | **1.09** | 0.622 U | **4.06** | **0.319 J** | 0.58 U | **3.49** | **1.16** | **0.376 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **6.82** | **1.93** | **0.627** | **14** | **0.991** | **0.535 J** | **7.6** | **1.29** | **1.27** |
| Barium | 7440-39-3 | 10000 | 820 | **71.5** | **82.1** | **18.7** | **571** | **13.1** | **17.7** | **165** | **44.2** | **27.8** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.463 J** | 0.66 U | 0.622 U | **0.414 J** | 0.576 U | 0.58 U | **0.366 J** | 0.643 U | 0.641 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.26 J** | 0.66 U | 0.622 U | **0.627** | 0.576 U | 0.58 U | **0.408 J** | 0.643 U | 0.641 U |
| Calcium | 7440-70-2 | NE | NE | **27600** | **1420** | **1090** | **9930** | **927** | **1240** | **5540** | **2440** | **1740** |
| Chromium | 7440-47-3 | NE | NE | **18.9** | **13** | **8.46** | **17.3** | **11.2** | **10.1** | **17.1** | **10.7** | **13.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.17 U | 1.22 U | 1.17 U | 1.17 U | 1.11 U | 1.1 U | 1.13 U | 1.23 U | 1.19 U |
| Cobalt | 7440-48-4 | NE | NE | **5.8** | **6.76** | **2.61** | **10.6** | **2.63** | **3.49** | **5.22** | **3.61** | **4.37** |
| Copper | 7440-50-8 | 10000 | 1720 | **71.4** | **17.6** | **7.07** | **112** | **11.5** | **8.54** | **131** | **16.3** | **14.4** |
| Iron | 7439-89-6 | NE | NE | **16900** | **12200** | **7330** | **16500** | **8250** | **7740** | **14600** | **9520** | **13900** |
| Lead | 7439-92-1 | 3900 | 450 | **155** | **59.5** | **2.4** | **1050** | **2.6** | **2.33** | **223** | **13.8** | **5.03** |
| Magnesium | 7439-95-4 | NE | NE | **10300** | **2300** | **1330** | **2650** | **1530** | **1550** | **3340** | **2120** | **2110** |
| Manganese | 7439-96-5 | 10000 | 2000 | **297** | **413** | **72.8** | **225** | **67.7** | **82.7** | **297** | **115** | **148** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.01** | **0.11** | **0.0074** | **1.45** | **0.011** | 0.006 U | **1.05** | **0.023** | **0.017** |
| Nickel | 7440-02-0 | 10000 | 130 | **15.8** | **20.5** | **6.43** | **14.9** | **7.92** | **8.02** | **14.8** | **9.12** | **9.64** |
| Potassium | 7440-09-7 | NE | NE | **1080** | **1210** | **485** | **949** | **628** | **541** | **1020** | **634** | **807** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.63** | **1.34** | **1.01** | **1.3** | 0.576 U | **0.72** | **1.63** | **0.948** | **0.858** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.625 U | 0.66 U | 0.622 U | **0.264 J** | 0.576 U | 0.58 U | **0.546 J** | 0.643 U | 0.641 U |
| Sodium | 7440-23-5 | NE | NE | **1300** | **800** | **531** | **1080** | **532** | **492** | **320** | **637** | **536** |
| Thallium | 7440-28-0 | NE | NE | **0.207 J** | **0.271 J** | 0.622 U | **0.3 J** | 0.576 U | 0.58 U | **0.265 J** | 0.643 U | 0.641 U |
| Vanadium | 7440-62-2 | NE | NE | **36.5** | **23** | **13.3** | **25.2** | **15.4** | **16.2** | **24.3** | **16.5** | **27.3** |
| Zinc | 7440-66-6 | 10000 | 2480 | **93.8** | **52.6** | **12.8** | **350** | **41.7** | **13.1** | **193** | **46.6** | **27.7** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3 U | 2.9 U | 2.9 U | 2.8 U | 2.8 U | 2.8 U | 3.1 U | 3 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **27600** | **3740** | 1000 U | **53700** | 1000 U | 1000 U | **6830** | **834 J** | 1000 U |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 7 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB324 | GPEC-SB324 | GPEC-SB/PZ-325 | GPEC-SB325 | GPEC-SB328 | GPEC-SB328 | GPEC-SB328 | GPEC-SB/PZ-329 |
| | | | Sample Name | GPEC-SB324 (5-5.5) | GPEC-SB324 (12.5-13.5) | GPEC-SB/PZ325 (5-5.5) | GPEC-SB325 (26-27) | GPEC-SB328 (5-5.5) | GPEC-SB328 (17.5-18.5) | GPEC-SB328 (74-75) | GPEC-SB/PZ329 (5-5.5) |
| | | | Start Depth | 5 | 12.5 | 5 | 26 | 5 | 17.5 | 74 | 5 |
| | | | End Depth | 5.5 | 13.5 | 5.5 | 27 | 5.5 | 18.5 | 75 | 5.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/24/2015 | 4/9/2015 | 3/9/2015 | 4/7/2015 | 3/3/2015 | 7/8/2015 | 7/9/2015 | 3/2/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00574 U | 0.00599 U | **0.00171 J** | **0.00423 DJ** | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.012 U | 0.012 UJ | 0.013 U | 0.011 U | 0.019 U | **0.00539 DJ** | 0.014 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | **0.00171** | **0.00423** | ND | ND | **0.00539** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 U | 0.03 U | 0.029 UJ | 0.033 U | 0.028 U | **0.074 D** | 0.03 U | 0.035 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.115 U | 0.12 U | 0.116 R | 0.131 U | 0.11 U | 0.192 U | 0.119 U | 0.14 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.115 U | 0.12 U | 0.116 UJ | 0.131 U | 0.11 U | 0.192 U | 0.119 U | 0.14 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Bromoform | 75-25-2 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.019 U | 0.012 U | 0.00702 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 0.00599 U | 0.012 UJ | 0.00655 U | 0.011 U | 0.00962 U | 0.00597 U | 0.014 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | **0.01 D** | 0.00597 U | 0.00702 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.023 U | 0.024 U | 0.023 R | 0.026 U | 0.022 U | 0.039 U | 0.024 U | 0.028 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00574 U | **0.00772 D** | **0.00441 J** | **0.0056 DJ** | 0.00552 U | **0.013 D** | 0.00597 U | 0.00702 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00574 U | 0.012 U | 0.00579 UJ | 0.013 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.012 U | 0.00599 U | 0.012 UJ | 0.00655 U | 0.011 U | 0.00962 U | 0.00597 U | 0.014 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.024 CD** | **0.033 CD** | 0.012 UJ | 0.013 U | 0.011 U | **0.029 CD** | **0.014 CD** | 0.014 U |
| Styrene | 100-42-5 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | **0.00333 DJ** |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00574 U | 0.00599 U | 0.00579 UJ | 0.00655 U | 0.00552 U | 0.00962 U | 0.00597 U | 0.00702 U |
| Total VOCs | TVOC | NE | NE | **0.024** | **0.04072** | **0.00612** | **0.00983** | ND | **0.126** | **0.01939** | **0.00333** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **3.66 D** | 0.04 U | 0.038 U | 0.043 U | 0.035 U | **0.131** | 0.038 U | 0.046 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **9.04 D** | 0.04 U | 0.038 U | 0.043 U | 0.035 U | **0.064** | 0.038 U | 0.046 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **18.2 D** | **0.056** | 0.038 U | 0.043 U | 0.035 U | **0.22** | 0.038 U | 0.046 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **19.7 D** | **0.09** | 0.038 U | 0.043 U | 0.035 U | **0.092** | 0.038 U | 0.046 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **103 D** | **0.315** | 0.038 U | 0.043 U | **0.049** | **0.933** | 0.038 U | 0.046 U |
| Fluorene | 86-73-7 | 1000 | 386 | **18.5 D** | **0.05** | 0.038 U | 0.043 U | 0.035 U | **0.151** | 0.038 U | 0.046 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **3.79 D** | 0.04 U | 0.038 U | 0.043 U | 0.035 U | **0.113** | 0.038 U | 0.046 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **13 D** | **0.052** | 0.038 U | **0.091** | 0.035 U | **0.243** | 0.038 U | **0.069** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **88.2 D** | **0.23** | 0.038 U | 0.043 U | 0.035 U | **0.809** | 0.038 U | 0.046 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **73.3 D** | **0.264** | 0.038 U | 0.043 U | **0.04** | **0.829** | 0.038 U | 0.046 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **44.3 D** | **0.157** | 0.038 U | 0.043 U | **0.029 J** | **0.439** | 0.038 U | 0.046 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **53 D** | **0.142** | 0.038 U | 0.043 U | 0.035 U | **0.261** | 0.038 U | 0.046 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **48.7 D** | **0.125** | 0.038 U | 0.043 U | 0.035 U | **0.231** | 0.038 U | 0.046 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **38.7 D** | **0.121** | 0.038 U | 0.043 U | 0.035 U | **0.357** | 0.038 U | 0.046 U |
| Chrysene | 218-01-9 | 110 | 1 | **42.4 D** | **0.157** | 0.038 U | 0.043 U | **0.032 J** | **0.53** | 0.038 U | 0.046 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **7.93 D** | **0.027 J** | 0.038 U | 0.043 U | 0.035 U | **0.05 J** | 0.038 U | 0.046 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **22 D** | **0.083** | 0.038 U | 0.043 U | 0.035 U | **0.121** | 0.038 U | 0.046 U |
| Total PAHs | TPAH | NE | NE | **607.42** | **1.869** | ND | **0.091** | **0.15** | **5.574** | ND | **0.069** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB324 | GPEC-SB324 | GPEC-SB/PZ-325 | GPEC-SB325 | GPEC-SB328 | GPEC-SB328 | GPEC-SB328 | GPEC-SB/PZ-329 |
| | | | | Sample Name | GPEC-SB324 (5-5.5) | GPEC-SB324 (12.5-13.5) | GPEC-SB/PZ325 (5-5.5) | GPEC-SB325 (26-27) | GPEC-SB328 (5-5.5) | GPEC-SB328 (17.5-18.5) | GPEC-SB328 (74-75) | GPEC-SB/PZ329 (5-5.5) |
| | | | | Start Depth | 5 | 12.5 | 5 | 26 | 5 | 17.5 | 74 | 5 |
| | | | | End Depth | 5.5 | 13.5 | 5.5 | 27 | 5.5 | 18.5 | 75 | 5.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/24/2015 | 4/9/2015 | 3/9/2015 | 4/7/2015 | 3/3/2015 | 7/8/2015 | 7/9/2015 | 3/2/2015 |
| | | | | Parent Sample Code | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.743 U | **0.153** | **0.074** | **0.043** | **0.075** | 0.062 U | 0.038 U | **0.486** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Carbazole | 86-74-8 | NE | NE | **11.3 D** | **0.037 J** | 0.038 U | 0.043 U | 0.035 U | **0.067** | 0.038 U | 0.046 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **11 D** | **0.034 J** | 0.038 U | 0.043 U | 0.035 U | **0.107** | 0.038 U | 0.046 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | **0.071** | 0.038 U | 0.046 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | **0.09** | 0.038 U | 0.046 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Pyridine | 110-86-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.743 U | 0.04 U | 0.038 U | 0.043 U | 0.035 U | 0.062 U | 0.038 U | 0.046 U |
| Total SVOCs | TSVOC | NE | NE | **629.72** | **2.093** | **0.074** | **0.134** | **0.225** | **5.909** | ND | **0.555** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.036 U | 0.022 U | 0.027 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB324 | GPEC-SB324 | GPEC-SB/PZ-325 | GPEC-SB325 | GPEC-SB328 | GPEC-SB328 | GPEC-SB328 | GPEC-SB/PZ-329 |
| Sample Name | | | | GPEC-SB324 (5-5.5) | GPEC-SB324 (12.5-13.5) | GPEC-SB/PZ325 (5-5.5) | GPEC-SB325 (26-27) | GPEC-SB328 (5-5.5) | GPEC-SB328 (17.5-18.5) | GPEC-SB328 (74-75) | GPEC-SB/PZ329 (5-5.5) |
| Start Depth | | | | 5 | 12.5 | 5 | 26 | 5 | 17.5 | 74 | 5 |
| End Depth | | | | 5.5 | 13.5 | 5.5 | 27 | 5.5 | 18.5 | 75 | 5.5 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 3/24/2015 | 4/9/2015 | 3/9/2015 | 4/7/2015 | 3/3/2015 | 7/8/2015 | 7/9/2015 | 3/2/2015 |
| Parent Sample Code | | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.055 U | NA | 0.057 U | NA | 0.054 U | NA | NA | 0.069 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.01** | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00439 U | NA | 0.00455 U | NA | 0.00431 U | NA | NA | 0.00549 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.055 U | NA | 0.057 U | NA | 0.054 U | NA | NA | 0.069 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | 0.019 U | NA | 0.018 U | NA | NA | 0.023 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | 0.019 U | NA | 0.018 U | NA | NA | 0.023 U |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9010** | **13300** | **6350** | **13700** | **7650** | **12800** | **3600** | **7350** |
| Antimony | 7440-36-0 | NE | NE | **9.26** | **0.42 J** | 0.609 U | 0.677 U | **3.18** | **17.1** | 0.622 U | **167** |
| Arsenic | 7440-38-2 | 16 | 16 | **13.3** | **3.08** | **3.16** | **3.13** | **3.04** | **43.2** | **0.727** | **107** |
| Barium | 7440-39-3 | 10000 | 820 | **425** | **51.7** | **36.8** | **48.8** | **58.7** | **119** | **23.3** | **2510** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.499 J** | **0.483 J** | **0.563 J** | **0.609 J** | **0.457 J** | **0.685 J** | 0.622 U | **0.505 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.987** | 0.628 U | 0.609 U | 0.677 U | 0.593 U | **0.524 J** | 0.622 U | **2.42** |
| Calcium | 7440-70-2 | NE | NE | **7430** | **2700** | **2780** | **1840** | **1590** | **7030** | **12600** | **45300** |
| Chromium | 7440-47-3 | NE | NE | **25** | **20.7** | **18.3** | **24.6** | **19.6** | **29.7** | **8.98** | **2100** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.15 U | 1.2 U | 1.16 UJ | 1.31 U | 1.1 U | 1.92 U | 1.19 U | 1.4 U |
| Cobalt | 7440-48-4 | NE | NE | **7.32** | **6.19** | **7.82** | **6.42** | **6.15** | **12.7** | **3.37** | **9.27** |
| Copper | 7440-50-8 | 10000 | 1720 | **297** | **18.7** | **19.9** | **18.9** | **32.3** | **612** | **8.39** | **889** |
| Iron | 7439-89-6 | NE | NE | **25400** | **16600** | **23300** | **22900** | **18100** | **32200** | **8330** | **53300** |
| Lead | 7439-92-1 | 3900 | 450 | **567** | **28.8** | **9.47** | **15.7** | **61.7** | **338** | **2.33** | **2630** |
| Magnesium | 7439-95-4 | NE | NE | **2700** | **2390** | **3170** | **2980** | **2270** | **3440** | **6530** | **3630** |
| Manganese | 7439-96-5 | 10000 | 2000 | **429** | **266** | **471** | **335** | **227** | **239** | **154** | **1300** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.76** | **0.118** | **0.0076** | **0.081** | **1.77** | **0.792** | **0.015** | **1.29** |
| Nickel | 7440-02-0 | 10000 | 130 | **24.1** | **12.5** | **16** | **15.1** | **13.5** | **51.6** | **7.85** | **42.1** |
| Potassium | 7440-09-7 | NE | NE | **992** | **784** | **1240** | **1460** | **1230** | **1830** | **860** | **1590** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.72** | **2.17** | **2.06** | **2.75** | **1.83** | **12.6** | **0.818** | **3.7** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.525 J** | 0.628 U | 0.609 U | 0.677 U | 0.593 U | **1.99** | 0.622 U | **5.04** |
| Sodium | 7440-23-5 | NE | NE | **936** | **820** | **148** | **716** | **181** | **1130** | **227** | **2310** |
| Thallium | 7440-28-0 | NE | NE | **0.239 J** | 0.628 U | **0.288 J** | **0.201 J** | **0.167 J** | **1.45** | **0.393 J** | **0.396 J** |
| Vanadium | 7440-62-2 | NE | NE | **31.3** | **27.2** | **26.2** | **36.1** | **28.3** | **40.3** | **14.4** | **23.8** |
| Zinc | 7440-66-6 | 10000 | 2480 | **642** | **48.6** | **42.4** | **45.5** | **56.6** | **267** | **17** | **1510** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3 U | 2.9 U | 3.3 U | 2.8 U | 4.8 U | 3 U | 3.5 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **35700** | **6050** | **7210** | **37500** | **1360** | **6310** | 1000 U | **64300** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 7 | Area 7 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 1 | Phase 1 | Phase 1 |
| | | | | Location Name | GPEC-SB/PZ-329 | GPEC-SB/PZ-329 | GPEC-SB345 | GPEC-SB345 | GPEC-SB/PZ-346 | GPEC-SB346 | GPEC-SB222 | GPEC-SB222 | GPEC-SB222 |
| | | | | Sample Name | GPEC-SB/PZ329 (7-8) | GPEC-SB/PZ329 (24-25) | GPEC-SB345 (5-5.5) | GPEC-SB500 (5-5.5) | GPEC-SB/PZ346 | GPEC-SB346 (18.5-19.5) | GPEC-SB222 (6-7) | GPEC-SB222 (18-19) | GPEC-SB222 (29-30) |
| | | | | Start Depth | 7 | 24 | 5 | 5 | 5.5 | 18.5 | 6 | 18 | 29 |
| | | | | End Depth | 8 | 25 | 5.5 | 5.5 | 6 | 19.5 | 7 | 19 | 30 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 4/2/2015 | 4/2/2015 | 3/9/2015 | 3/9/2015 | 3/12/2015 | 4/8/2015 | 6/26/2012 | 6/29/2012 | 6/29/2012 |
| | | | | Parent Sample Code | | | | GPEC-SB-345 (5-5.5) | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | **0.911** | **0.952** | 0.02 UJ |
| Toluene | 108-88-3 | 1000 | 0.7 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | **0.326** | 0.259 U | 0.02 UJ |
| Ethylbenzene | 100-41-4 | 780 | 1 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | **0.26** | **0.254 J** | 0.02 UJ |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | 0.014 U | 0.017 U | 0.012 UJ | 0.012 UJ | 0.011 U | 0.019 U | **0.336** | 0.517 U | 0.041 UJ |
| Total BTEX | TBTEX | NE | NE | | ND | ND | ND | ND | ND | ND | **1.833** | **1.206** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 0.035 U | 0.041 U | 0.03 UJ | 0.03 UJ | 0.028 U | 0.047 U | 0.13 U | 0.259 U | 0.102 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 0.14 U | 0.165 U | 0.121 R | 0.121 R | 0.113 U | 0.186 U | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | | 0.14 U | 0.165 U | 0.121 UJ | 0.121 UJ | 0.113 U | 0.186 U | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Bromoform | 75-25-2 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.041 UJ |
| Bromomethane | 74-83-9 | NE | NE | | 0.014 U | 0.017 U | 0.012 UJ | 0.012 UJ | 0.011 U | 0.00931 U | 0.13 U | 0.259 U | 0.041 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | **0.012 D** | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 0.028 U | 0.033 U | 0.024 UJ | 0.024 R | 0.023 U | 0.037 U | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | **0.013 D** | **0.102 D** | 0.00604 UJ | 0.00605 UJ | 0.00565 U | **0.012 D** | 0.13 U | 0.259 U | 0.02 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.019 U | 0.13 U | 0.259 U | 0.02 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | | 0.014 U | 0.017 U | 0.012 UJ | 0.012 UJ | 0.011 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Chloromethane | 74-87-3 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.041 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.041 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.041 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | **0.032 CD** | **0.043 CD** | 0.012 UJ | 0.012 UJ | 0.011 U | **0.029 CD** | 0.259 U | 0.517 U | 0.041 UJ |
| Styrene | 100-42-5 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 0.007 U | 0.00824 U | 0.00604 UJ | 0.00605 UJ | 0.00565 U | 0.00931 U | 0.13 U | 0.259 U | 0.02 UJ |
| Total VOCs | TVOC | NE | NE | | **0.057** | **0.145** | ND | ND | ND | **0.041** | **1.833** | **1.206** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | **1.31 D** | **0.102** | **0.296** | **0.423** | **0.21** | 0.06 U | **4.9** | **0.876** | 0.135 UJ |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | 0.18 U | 0.053 U | **0.036 J** | **0.05** | **0.184** | 0.06 U | **4.5** | **0.101** | 0.135 UJ |
| Anthracene | 120-12-7 | 1000 | 1000 | | **4.19 D** | **0.039 J** | **0.424** | **0.543** | **0.53** | 0.06 U | **6.78** | **0.42** | 0.135 UJ |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | **3.15 D** | 0.053 U | **1.33** | **1.77** | **1.4** | 0.06 U | **4.32** | **0.204** | 0.135 UJ |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | **15 D** | **0.095** | **3.28** | **4.44** | **2.8** | **0.067** | **17.1** | **1.59** | 0.135 UJ |
| Fluorene | 86-73-7 | 1000 | 386 | | **1.27 D** | **0.049 J** | **0.189** | **0.249** | **0.267** | 0.06 U | **7.17** | **0.653** | 0.135 UJ |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | **0.573 D** | **0.075** | **0.079** | **0.109** | **0.119** | 0.06 U | **2.45** | **2.08** | 0.135 UJ |
| Naphthalene | 91-20-3 | 1000 | 12 | | **0.943 D** | **0.466** | **0.23** | **0.326** | **0.183** | **0.16** | **6.57** | **8.31** | 0.135 UJ |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | **15 D** | **0.157** | **2.17** | **2.72** | **1.63** | **0.058 J** | **20.6** | **1.94** | 0.135 UJ |
| Pyrene | 129-00-0 | 1000 | 1000 | | **19.6 D** | **0.104** | **3.13** | **3.84** | **2.84** | **0.065** | **20.1** | **1.29** | 0.135 UJ |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | **10.8 D** | **0.069** | **1.68** | **2.17** | **1.65** | **0.04 J** | **9.83** | **0.622** | 0.135 UJ |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | **10.4 D** | **0.045 J** | **1.87** | **2.46** | **2.01** | 0.06 U | **12.4** | **0.659** | 0.135 UJ |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | **7.71 D** | **0.045 J** | **2.01** | **2.56** | **2.1** | 0.06 U | **7.72** | **0.626** | 0.135 UJ |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | **6.5 D** | **0.037 J** | **1.63** | **2.29** | **1.53** | 0.06 U | **7.7** | **0.462** | 0.135 UJ |
| Chrysene | 218-01-9 | 110 | 1 | | **13 D** | **0.081** | **1.92** | **2.43** | **1.94** | **0.04 J** | **10.5** | **0.686** | 0.135 UJ |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | **1.86 D** | 0.053 U | **0.432** | **0.596** | **0.49** | 0.06 U | **3.07** | **0.075 J** | 0.135 UJ |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | **2.88 D** | 0.053 U | **1.14** | **1.47** | **1.19** | 0.06 U | **3.9** | **0.214** | 0.135 UJ |
| Total PAHs | TPAH | NE | NE | | **114.186** | **1.364** | **21.846** | **28.446** | **21.073** | **0.43** | **149.61** | **20.808** | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB/PZ-329 | GPEC-SB/PZ-329 | GPEC-SB345 | GPEC-SB345 | GPEC-SB/PZ-346 | GPEC-SB346 | GPEC-SB222 | GPEC-SB222 | GPEC-SB222 |
| | | | Sample Name | GPEC-SB/PZ329 (7-8) | GPEC-SB/PZ329 (24-25) | GPEC-SB345 (5-5.5) | GPEC-SB500 (5-5.5) | GPEC-SB/PZ346 | GPEC-SB346 (18.5-19.5) | GPEC-SB222 (6-7) | GPEC-SB222 (18-19) | GPEC-SB222 (29-30) |
| | | | Start Depth | 7 | 24 | 5 | 5 | 5.5 | 18.5 | 6 | 18 | 29 |
| | | | End Depth | 8 | 25 | 5.5 | 5.5 | 6 | 19.5 | 7 | 19 | 30 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/2/2015 | 4/2/2015 | 3/9/2015 | 3/9/2015 | 3/12/2015 | 4/8/2015 | 6/26/2012 | 6/29/2012 | 6/29/2012 |
| | | | Parent Sample Code | | | | GPEC-SB-345 (5-5.5) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.18 U | 0.053 U | 0.039 R | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.18 U | 0.053 U | **0.179 J** | **0.385 J** | **0.352** | **3.06** | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Carbazole | 86-74-8 | NE | NE | **0.637 D** | 0.053 U | **0.291** | **0.371** | **0.153** | 0.06 U | 0.171 U | **0.242** | 0.135 UJ |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.526 D** | **0.034 J** | **0.12** | **0.166** | **0.186** | 0.06 U | **1.31** | **0.174** | 0.135 UJ |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.18 U | 0.053 U | 0.039 R | 0.039 U | 0.038 U | 0.06 U | 0.171 U | R | R |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | R | R | R |
| Hexachloroethane | 67-72-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Isophorone | 78-59-1 | NE | 4.4 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.337 D** | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Pyridine | 110-86-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.18 U | 0.053 U | 0.039 U | 0.039 U | 0.038 U | 0.06 U | 0.171 U | 0.085 U | 0.135 UJ |
| Total SVOCs | TSVOC | NE | NE | **115.686** | **1.398** | **22.436** | **29.368** | **21.764** | **3.49** | **150.92** | **21.224** | ND |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.026 U | 0.032 U | 0.022 U | 0.023 U | 0.021 U | 0.069 U | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | 0.024 U | 0.025 U | 0.08 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | 0.024 U | 0.025 U | 0.08 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 7 | Area 7 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 1 | Phase 1 | Phase 1 |
| | | | | Location Name | GPEC-SB/PZ-329 | GPEC-SB/PZ-329 | GPEC-SB345 | GPEC-SB345 | GPEC-SB/PZ-346 | GPEC-SB346 | GPEC-SB222 | GPEC-SB222 | GPEC-SB222 |
| | | | | Sample Name | GPEC-SB/PZ329 (7-8) | GPEC-SB/PZ329 (24-25) | GPEC-SB345 (5-5.5) | GPEC-SB500 (5-5.5) | GPEC-SB/PZ346 | GPEC-SB346 (18.5-19.5) | GPEC-SB222 (6-7) | GPEC-SB222 (18-19) | GPEC-SB222 (29-30) |
| | | | | Start Depth | 7 | 24 | 5 | 5 | 5.5 | 18.5 | 6 | 18 | 29 |
| | | | | End Depth | 8 | 25 | 5.5 | 5.5 | 6 | 19.5 | 7 | 19 | 30 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 4/2/2015 | 4/2/2015 | 3/9/2015 | 3/9/2015 | 3/12/2015 | 4/8/2015 | 6/26/2012 | 6/29/2012 | 6/29/2012 |
| | | | | Parent Sample Code | | | | GPEC-SB-345 (5-5.5) | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | | NA | NA | 0.056 U | 0.057 U | 0.054 U | NA | 0.06 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | | NA | NA | **0.00334 J** | **0.004 J** | 0.00428 U | NA | 0.00481 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | | NA | NA | 0.00449 U | 0.00455 U | 0.00428 U | NA | 0.00481 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | | NA | NA | 0.056 U | 0.057 U | 0.054 U | NA | 0.06 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | | NA | NA | 0.02 U | 0.02 U | 0.018 U | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | | NA | NA | 0.02 U | 0.02 U | 0.018 U | NA | NA | NA | NA |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | | **3610** | **15700** | **6350** | **6320** | **3700** | **7010** | **6110** | **8850** | **2240 J** |
| Antimony | 7440-36-0 | NE | NE | | **32.5** | **6** | **2.12 J** | **3.7 J** | **13.8** | **3.64** | **0.48 J** | 1.38 U | 4.48 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | | **26** | **11.4** | **8.34** | **8.53** | **6.69** | **18.9** | **12.7** | **7.99** | **2.53 J** |
| Barium | 7440-39-3 | 10000 | 820 | | **327** | **251** | **103** | **102** | **198** | **56.1** | **350** | **119** | **12.8 J** |
| Beryllium | 7440-41-7 | 2700 | 47 | | **0.343 J** | **0.864** | **0.572 J** | **0.605 J** | **0.29 J** | 1 U | **1.27** | **0.567 J** | 2.24 UJ |
| Cadmium | 7440-43-9 | 60 | 7.5 | | **6.42** | **1.99** | **0.418 J** | **0.508 J** | **0.692** | **13.6** | **2.06** | **0.395 J** | 2.24 UJ |
| Calcium | 7440-70-2 | NE | NE | | **22700** | **8870** | **2910** | **4300** | **5460** | **24300** | **4710** | **4040** | **11500 J** |
| Chromium | 7440-47-3 | NE | NE | | **38.6** | **72.8** | **22** | **23.1** | **19.4** | **15.2** | **38.6** | **18.5** | **6.01 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | | 1.4 U | 1.65 U | 1.21 UJ | 1.21 UJ | 1.13 U | 1.86 U | 1.3 U | 1.29 UJ | 4.07 UJ |
| Cobalt | 7440-48-4 | NE | NE | | **7.63** | **10** | **6.68** | **6.21** | **3.96** | **11.5** | **11.7** | **6.72** | 8.96 UJ |
| Copper | 7440-50-8 | 10000 | 1720 | | **2360** | **164** | **98.3** | **111** | **116** | **58.3** | **347** | **75.3** | **11.2 J** |
| Iron | 7439-89-6 | NE | NE | | **38600** | **58200** | **22700** | **22400** | **12200** | **56400** | **23100** | **19600** | **19600 J** |
| Lead | 7439-92-1 | 3900 | 450 | | **6560** | **1090** | **190** | **248** | **302** | **94.4** | **1640** | **219** | **0.945 J** |
| Magnesium | 7439-95-4 | NE | NE | | **4340** | **6610** | **2570** | **3130** | **1500** | **3740** | **2240** | **2140** | **8740 J** |
| Manganese | 7439-96-5 | 10000 | 2000 | | **10400** | **551** | **299** | **325** | **181** | **706** | **245** | **281** | **49.5 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | | **2.07** | **0.344** | **0.238 J** | **0.863 J** | **0.656** | **0.901** | **0.567** | **1.18 J** | **0.101 J** |
| Nickel | 7440-02-0 | 10000 | 130 | | **49** | **25.7** | **19.7** | **20.2** | **12.5** | **25** | **59** | **18.6** | **4.24 J** |
| Potassium | 7440-09-7 | NE | NE | | **724** | **3740** | **1120** | **1060** | **592** | **1500** | **648** | **848** | **1060 J** |
| Selenium | 7782-49-2 | 6800 | 4 | | **7.95** | **2.53** | **2.44** | **2.12** | **1.77** | **1.35** | **1.46 J** | 2.76 U | 8.96 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | | **4.82** | **0.333 J** | **0.204 J** | **0.234 J** | **0.258 J** | 1 U | **0.32 J** | **0.384 J** | 2.24 UJ |
| Sodium | 7440-23-5 | NE | NE | | **1500** | **4600** | **97.8** | **146** | **676** | **1750** | **154** | **166** | **14300 J** |
| Thallium | 7440-28-0 | NE | NE | | **0.563 J** | **0.492 J** | **1.23** | **0.241 J** | 0.604 U | 1 U | **0.548 J** | **0.173 J** | 2.24 UJ |
| Vanadium | 7440-62-2 | NE | NE | | **19.4** | **40.7** | **30.8** | **31.8** | **21.5** | **27.4** | **21.1** | **28** | **16.2 J** |
| Zinc | 7440-66-6 | 10000 | 2480 | | **3280** | **702** | **183** | **187** | **273** | **10300** | **1180** | **184** | 8.96 UJ |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | | 3.5 U | 4.1 U | 3 U | 3 U | 2.8 U | 4.7 U | 1.3 U | 1.29 U | 4.07 UJ |
| Total Cyanide | 57-12-5 | 10000 | 40 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | | **129000** | **27800** | **9240** | **13200** | **14300** | **32500** | **114000** | **21400** | **193000** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 1 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB222 | GPEC-TP318 | GPEC-TP318 | GPEC-TP318 | GPEC-TP318 | GPEC-TP319 | GPEC-TP319 | GPEC-TP320 | GPEC-TP320 |
| Sample Name | | | | GPEC-SB222 (98-99) | GPEC-TP318 A | GPEC-TP318 B | GPEC-TP318EX A | GPEC-TP318EX B | GPEC-TP319A | GPEC-TP319B | GPEC-TP320A | GPEC-TP320B |
| Start Depth | | | | 98 | 4 | 9.5 | 2.5 | 10.5 | 7.5 | 7.5 | 8 | 10 |
| End Depth | | | | 99 | 4.5 | 10 | 3 | 11 | 8 | 8 | 8.5 | 10.5 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 6/29/2012 | 9/18/2014 | 9/18/2014 | 10/15/2014 | 10/17/2014 | 8/5/2014 | 8/5/2014 | 8/27/2014 | 8/27/2014 |
| Parent Sample Code | | | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | **0.00484 DJ** | 2.49 UJ | 6.31 UJ | **0.394 J** | 1.27 UJ |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00624 U | **3.59 D** | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | **0.479 J** | **0.447 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00624 U | **8.43 D** | **1.47 D** | 0.00608 U | 0.00631 U | **75.5 J** | **38 J** | **17.3 J** | **64.8 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.013 U | **12.2 D** | **1.04 DJ** | 0.012 U | 0.013 U | **84 J** | 12.6 UJ | **5.38 J** | **40.9 J** |
| Total BTEX | TBTEX | NE | NE | ND | **24.22** | **2.51** | ND | **0.00484** | **159.5** | **38** | **23.553** | **106.147** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.031 U | 4.49 U | 1.19 U | 0.03 U | 0.032 U | 4.98 UJ | 12.6 UJ | 1.34 UJ | 2.53 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | 44.9 U | 11.9 U | 0.122 U | 0.126 U | 49.8 R | 126 R | 13.4 UJ | 25.3 UJ |
| Acrylonitrile | 107-13-1 | NE | NE | NA | 44.9 U | 11.9 U | 0.122 U | 0.126 U | 49.8 UJ | 126 UJ | 13.4 UJ | 25.3 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Bromoform | 75-25-2 | NE | NE | 0.013 U | 2.25 U | 0.595 U | 0.012 U | 0.013 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Bromomethane | 74-83-9 | NE | NE | 0.013 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | 4.49 U | 1.19 U | 0.012 U | 0.013 U | 4.98 UJ | 12.6 UJ | 1.34 R | 2.53 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Chloromethane | 74-87-3 | NE | NE | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.013 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00624 U | 2.25 U | 0.595 U | **0.018 D** | **0.00494 DJ** | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.013 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.013 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.013 U | 4.49 U | 1.19 U | 0.012 U | 0.013 U | 4.98 UJ | 12.6 UJ | 1.34 UJ | 2.53 UJ |
| Styrene | 100-42-5 | NE | NE | 0.00624 U | **4.66 D** | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00624 U | 2.25 U | 0.595 U | **0.061 D** | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00624 U | 2.25 U | 0.595 U | **0.032 D** | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00624 U | 2.25 U | 0.595 U | **0.00945 D** | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | NA | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00624 U | 2.25 U | 0.595 U | 0.00608 U | 0.00631 U | 2.49 UJ | 6.31 UJ | 0.668 UJ | 1.27 UJ |
| Total VOCs | TVOC | NE | NE | ND | **28.88** | **2.51** | **0.12045** | **0.00978** | **159.5** | **38** | **23.553** | **106.147** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.041 U | **3.68 D** | **4.64 D** | **0.137** | 0.04 U | **86.3** | **65.3** | **59.5** | **92.2** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.041 U | **1.17 D** | **1.28 D** | **0.344** | 0.04 U | **19.4** | **7.17** | **9.15** | **10.6** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.041 U | **4.39 D** | **6.02 D** | **1.29** | **0.031 J** | **51.3** | **22.6** | **53.2** | **61.3** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.041 U | **1.57 D** | **1.51 D** | **1.47** | 0.04 U | **10** | **5.27** | **18.7** | **18.3** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.041 U | **7.06 D** | **7.8 D** | **2.92** | **0.043** | **68.6** | **31.1** | **84.3** | **82.2** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.041 U | **5.24 D** | **5.6 D** | **0.086** | 0.04 U | **86.3** | **54.2** | **85.1** | **105** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.041 U | **16 D** | **3.49 D** | **0.119** | 0.04 U | **377** | **246** | **136** | **380** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.041 U | **48.1 D** | **13.1 D** | **0.143** | 0.04 U | **874** | **587** | **321** | **618** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.041 U | **21.2 D** | **26 D** | **0.649** | **0.043** | **264** | **117** | **268** | **257** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.041 U | **10.9 D** | **13.1 D** | **2.75** | **0.038 J** | **78.1** | **42.3** | **173** | **142** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.041 U | **4.25 D** | **4.82 D** | **2.12** | **0.025 J** | **32** | **15.5** | **49.7** | **46.5** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.041 U | **3.1 D** | **3.67 D** | **1.51** | 0.04 U | **39.2** | **19.4** | **46.3** | **40** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.041 U | **1.84 D** | **1.74 D** | **1.95** | 0.04 U | **22.1** | **10.8** | **21.1** | **21.3** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.041 U | **1.99 D** | **2.41 D** | **1.44** | 0.04 U | **18.4** | **10.5** | **28.8** | **27.7** |
| Chrysene | 218-01-9 | 110 | 1 | 0.041 U | **4.26 D** | **4.93 D** | **2.24** | **0.025 J** | **31.8** | **14.8** | **51.4** | **49.3** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.041 U | **0.458 D** | **0.513 D** | **0.57** | 0.04 U | **5.87** | **1.94** | **8.64** | **7.26** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.041 U | **1.26 D** | **1.36 D** | **1.24** | 0.04 U | **9.55** | **5.34** | **17.7** | **17.1** |
| Total PAHs | TPAH | NE | NE | ND | **136.468** | **111.983** | **20.978** | **0.205** | **2073.92** | **1256.22** | **1431.59** | **1975.76** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 1** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB222** | **GPEC-TP318** | **GPEC-TP318** | **GPEC-TP318** | **GPEC-TP318** | **GPEC-TP319** | **GPEC-TP319** | **GPEC-TP320** | **GPEC-TP320** |
| **Sample Name** | | | | **GPEC-SB222 (98-99)** | **GPEC-TP318 A** | **GPEC-TP318 B** | **GPEC-TP318EX A** | **GPEC-TP318EX B** | **GPEC-TP319A** | **GPEC-TP319B** | **GPEC-TP320A** | **GPEC-TP320B** |
| **Start Depth** | | | | **98** | **4** | **9.5** | **2.5** | **10.5** | **7.5** | **7.5** | **8** | **10** |
| **End Depth** | | | | **99** | **4.5** | **10** | **3** | **11** | **8** | **8** | **8.5** | **10.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **6/29/2012** | **9/18/2014** | **9/18/2014** | **10/15/2014** | **10/17/2014** | **8/5/2014** | **8/5/2014** | **8/27/2014** | **8/27/2014** |
| Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 7.89 U | 8.2 U | 2.67 UJ | 3.8 UJ |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 UJ | 3.8 UJ |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 UJ | **3.98 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 UJ | 3.8 UJ |
| Carbazole | 86-74-8 | NE | NE | 0.041 U | **0.578 D** | **0.288 DJ** | 0.04 U | 0.04 U | **5.81** | **1.61** | **2.01 J** | **3.32 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.041 U | **2.03 D** | **2.24 D** | **0.056** | 0.04 U | **23.5** | **13.5** | **14.1** | **15.7** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.397 U | 0.402 U | 7.89 U | 8.2 U | 2.67 U | 3.8 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | R | 0.357 U | 0.376 U | 0.397 U | 0.402 U | 7.89 U | 8.2 U | 2.67 U | 3.8 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 UJ | 3.8 UJ |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Pyridine | 110-86-1 | NE | NE | NA | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.041 U | 0.357 U | 0.376 U | 0.04 U | 0.04 U | 0.789 U | 0.82 U | 2.67 U | 3.8 U |
| Total SVOCs | TSVOC | NE | NE | ND | **139.076** | **114.511** | **21.034** | **0.205** | **2103.23** | **1271.33** | **1447.7** | **1998.76** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.025 U | 0.044 U | 0.046 U | 0.047 U | 0.024 U | 0.047 U | 0.049 U | 0.026 U | 0.024 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.025 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.025 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | | Investigation Phase | Phase 1 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB222 | GPEC-TP318 | GPEC-TP318 | GPEC-TP318 | GPEC-TP318 | GPEC-TP319 | GPEC-TP319 | GPEC-TP320 | GPEC-TP320 |
| | | | | Sample Name | GPEC-SB222 (98-99) | GPEC-TP318 A | GPEC-TP318 B | GPEC-TP318EX A | GPEC-TP318EX B | GPEC-TP319A | GPEC-TP319B | GPEC-TP320A | GPEC-TP320B |
| | | | | Start Depth | 98 | 4 | 9.5 | 2.5 | 10.5 | 7.5 | 7.5 | 8 | 10 |
| | | | | End Depth | 99 | 4.5 | 10 | 3 | 11 | 8 | 8 | 8.5 | 10.5 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 6/29/2012 | 9/18/2014 | 9/18/2014 | 10/15/2014 | 10/17/2014 | 8/5/2014 | 8/5/2014 | 8/27/2014 | 8/27/2014 |
| | | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.055 U | 0.057 U | 0.117 U | 0.059 U | 0.582 U | 0.61 U | **0.118 J** | **0.143 J** | |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | **0.014 J** | **0.017 J** | |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | **0.016 J** | **0.022 J** | |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | **0.00883** | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | **0.023** | **0.00474** | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | **0.076 J** | **0.095 J** | |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00438 U | 0.00456 U | 0.00936 U | 0.00475 U | 0.047 U | 0.049 U | 0.00517 U | 0.0047 U | |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.055 U | 0.057 U | 0.117 U | 0.059 U | 0.582 U | 0.61 U | 0.065 U | 0.059 U | |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.018 U | 0.019 U | 0.02 U | 0.021 U | 0.02 U | 0.02 U | 0.022 U | 0.021 U | |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.018 U | 0.019 U | 0.02 U | 0.021 U | 0.02 U | 0.02 U | 0.022 U | 0.021 U | |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **18500** | **8620** | **9040** | **11200** | **11500** | **6800** | **6420** | **9340** | **7860** | |
| Antimony | 7440-36-0 | NE | NE | 1.31 U | 0.581 U | 0.63 U | **0.541 J** | 0.662 U | **3.91** | **3.19** | 0.695 U | 0.667 U | |
| Arsenic | 7440-38-2 | 16 | 16 | **17.3** | **7.64** | **4.67** | **9.88** | **7.01** | **15.7** | **13.6** | **11.1** | **4.07** | |
| Barium | 7440-39-3 | 10000 | 820 | **62.3** | **84.5** | **89.4** | **493** | **60.5** | **614** | **1210** | **181** | **88.5** | |
| Beryllium | 7440-41-7 | 2700 | 47 | **1.35** | **1.5** | **0.98** | **10.3** | **1.07** | **0.792** | **0.488 J** | **0.518 J** | **0.54 J** | |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.654 U | **0.302 J** | **0.255 J** | **2.67** | 0.662 U | **0.761** | **1** | **0.61 J** | **0.244 J** | |
| Calcium | 7440-70-2 | NE | NE | **1860** | **2150** | **2240** | **8010** | **1940** | **2940** | **8810** | **8000** | **5300** | |
| Chromium | 7440-47-3 | NE | NE | **33.4** | **32.5** | **21.2** | **221** | **28.6** | **52.6** | **49.9** | **23.6** | **17.6** | |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.25 UJ | 1.12 U | 1.19 U | **4.74** | 1.26 U | 1.24 UJ | 1.26 UJ | 1.34 U | 1.27 U | |
| Cobalt | 7440-48-4 | NE | NE | **16.7** | **11.7** | **11** | **65.4** | **14.6** | **10.9** | **5.96** | **7.72** | **7.01** | |
| Copper | 7440-50-8 | 10000 | 1720 | **49.2** | **131** | **92.8** | **1380** | **77.3** | **173** | **202** | **123** | **310** | |
| Iron | 7439-89-6 | NE | NE | **32000** | **23900** | **22700** | **56800** | **27700** | **21300** | **24000** | **22400** | **16600** | |
| Lead | 7439-92-1 | 3900 | 450 | **29** | **272** | **149** | **2510** | **120** | **581** | **1460** | **678** | **305** | |
| Magnesium | 7439-95-4 | NE | NE | **4590** | **2580** | **2400** | **4380** | **2530** | **2190** | **2120** | **2580** | **2900** | |
| Manganese | 7439-96-5 | 10000 | 2000 | **252** | **368** | **379** | **598** | **330** | **352** | **564** | **276** | **293** | |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.023** | **0.22** | **0.258** | **0.858** | **0.059** | **1.59** | **2.49** | **1.45** | **0.344** | |
| Nickel | 7440-02-0 | 10000 | 130 | **36.7** | **57.6** | **45.4** | **585** | **44.3** | **40.2** | **18.5** | **38.3** | **100** | |
| Potassium | 7440-09-7 | NE | NE | **2320** | **1090** | **1140** | **909** | **1340** | **1130** | **1030** | **1030 J** | **949 J** | |
| Selenium | 7782-49-2 | 6800 | 4 | **1.64 J** | **1.69** | **1.45** | **5.13** | **2.33** | **1.72** | **1.55** | **2.13** | **1.57** | |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.654 U | **0.194 J** | 0.63 U | **1.49** | 0.662 U | **0.338 J** | **0.442 J** | **0.404 J** | **0.76** | |
| Sodium | 7440-23-5 | NE | NE | **455** | **178** | **184** | **1140** | **243** | **172** | **234** | **202** | **180** | |
| Thallium | 7440-28-0 | NE | NE | **0.246 J** | **0.347 J** | **0.251 J** | **0.426 J** | **0.274 J** | 0.68 U | 0.694 U | **0.397 J** | **0.224 J** | |
| Vanadium | 7440-62-2 | NE | NE | **37.3** | **24.7** | **26.9** | **29.9** | **25.7** | **24.1** | **21.6** | **26** | **23.3** | |
| Zinc | 7440-66-6 | 10000 | 2480 | **96.5** | **437** | **282** | **4110** | **230** | **1220** | **1670** | **383** | **171** | |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.25 U | 2.8 U | 3 U | 3 U | 3.2 U | 3.1 U | 3.2 U | 3.3 U | 3.2 U | |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Organic Carbon | TOC | NE | NE | **16200** | **24400** | **7990** | **155000** | **14000** | **30400** | **32800** | **42600** | **18000** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** |
| **Sample Name** | | | | **GPEC-TP321A** | **GPEC-TP321B** | **GPEC-TP321C** | **GPEC-TP321D** | **GPEC-TP322A** | **GPEC-TP322B** | **GPEC-TP322C** | **GPEC-TP322D** |
| **Start Depth** | | | | **8** | **8** | **4** | **6** | **3.5** | **7** | **5** | **6** |
| **End Depth** | | | | **8.5** | **8.5** | **4.5** | **6.5** | **4** | **7.5** | **5.5** | **6.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **9/9/2014** | **9/9/2014** | **9/10/2014** | **9/10/2014** | **8/4/2014** | **8/4/2014** | **8/18/2014** | **8/22/2014** |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **33.7 D** | **6.21 DJ** | **14 D** | 0.115 U | **0.289 J** | **9.22 J** | 7.51 U | **0.197** |
| Toluene | 108-88-3 | 1000 | 0.7 | 13.1 U | 6.48 U | 6.44 U | **0.084 J** | **0.251 J** | 5.84 UJ | 7.51 U | **0.325** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **305 D** | **279 D** | **34.7 D** | 0.115 U | **0.225 J** | **108 J** | **72.6 D** | 0.139 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **263 D** | **210 D** | **10.3 DJ** | **0.222 J** | **1.03 J** | **16.4 J** | **16.3 D** | **0.429** |
| Total BTEX | TBTEX | NE | NE | **601.7** | **495.21** | **59** | **0.306** | **1.795** | **133.62** | **88.9** | **0.951** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 26.1 U | 13 U | 12.9 U | 0.229 U | 0.254 UJ | 11.7 UJ | 15 U | 0.277 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 261 U | 130 U | 129 U | 2.29 U | 2.54 R | 117 R | 150 U | 2.77 U |
| Acrylonitrile | 107-13-1 | NE | NE | 261 U | 130 U | 129 U | 2.29 U | 2.54 UJ | 117 UJ | 150 U | 2.77 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Bromoform | 75-25-2 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Bromomethane | 74-83-9 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 26.1 U | 13 U | 12.9 U | 0.229 U | 0.254 UJ | 11.7 UJ | 15 U | 0.277 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Chloromethane | 74-87-3 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | **0.108 J** | 5.84 UJ | 7.51 U | 0.139 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 2-Hexanone | 591-78-6 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 26.1 U | 13 U | 12.9 U | 0.229 U | 0.254 UJ | 11.7 UJ | 15 U | 0.277 U |
| Styrene | 100-42-5 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | **0.079 J** |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Vinyl acetate | 108-05-4 | NE | NE | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 13.1 U | 6.48 U | 6.44 U | 0.115 U | 0.127 UJ | 5.84 UJ | 7.51 U | 0.139 U |
| Total VOCs | TVOC | NE | NE | **601.7** | **495.21** | **59** | **0.306** | **1.903** | **133.62** | **88.9** | **1.03** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **23.5 D** | **8.12 D** | **4.97 D** | **0.684** | **3.41** | **46.5** | **283 D** | **0.173** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **2.51 D** | **1.06 D** | **0.975 D** | **0.215** | **9.61** | **13.5** | **50.5 D** | **2.35** |
| Anthracene | 120-12-7 | 1000 | 1000 | **17.5 D** | **4.58 D** | **4.31 D** | **0.582** | **15.8** | **49.2** | **201 D** | 0.045 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **4.24 D** | **0.871 D** | **1.36 D** | **0.068** | **20.1** | **9.23** | **47.5 D** | **1.79** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **22.3 D** | **6.24 D** | **5.23 D** | **0.417** | **40.1** | **87.5** | **305 D** | **0.581** |
| Fluorene | 86-73-7 | 1000 | 386 | **26.3 D** | **8.34 D** | **5.44 D** | **0.898** | **10.6** | **89.8** | **398 D** | **0.454** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **88.8 D** | **51.6 D** | **46.7 D** | **8.2 D** | **4.49** | **253** | **528 D** | **1.14** |
| Naphthalene | 91-20-3 | 1000 | 12 | **248 D** | **123 D** | **49.6 D** | **4.43 D** | **2.33** | **479** | **821 D** | **1.99** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **53.1 D** | **24 D** | **16.6 D** | **2.84** | **61** | **296** | **1550 D** | **1.47** |
| Pyrene | 129-00-0 | 1000 | 1000 | **32.6 D** | **8.31 D** | **8.43 D** | **0.695** | **47.2** | **113** | **456 D** | **0.973** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **12.2 D** | **2.98 D** | **3.11 D** | **0.163** | **19.1** | **44.6** | **163 D** | **0.885** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **10.5 D** | **2.49 D** | **3.35 D** | **0.113** | **22.1** | **54** | **124 D** | **1.45** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **5.92 D** | **1.62 D** | **2.06 D** | **0.096** | **21.7** | **32.9** | **57.9 D** | **1.29** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **5.85 D** | **1.15 D** | **1.82 D** | **0.05** | **18.7** | **20.7** | **77.9 D** | **1.33** |
| Chrysene | 218-01-9 | 110 | 1 | **12.9 D** | **3.18 D** | **3.53 D** | **0.189** | **24.4** | **40.2** | **184 D** | **0.826** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.71 D** | **0.343 DJ** | **0.404 DJ** | 0.037 U | **6.4** | **5.25** | **13.1 D** | **0.58** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **4.03 D** | **0.872 D** | **1.27 D** | **0.057** | **13.5** | **10.5** | **43.2 D** | **1.61** |
| Total PAHs | TPAH | NE | NE | **571.96** | **248.756** | **159.159** | **19.697** | **340.54** | **1644.88** | **5303.1** | **18.892** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** |
| **Sample Name** | | | | **GPEC-TP321A** | **GPEC-TP321B** | **GPEC-TP321C** | **GPEC-TP321D** | **GPEC-TP322A** | **GPEC-TP322B** | **GPEC-TP322C** | **GPEC-TP322D** |
| **Start Depth** | | | | **8** | **8** | **4** | **6** | **3.5** | **7** | **5** | **6** |
| **End Depth** | | | | **8.5** | **8.5** | **4.5** | **6.5** | **4** | **7.5** | **5.5** | **6.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **9/9/2014** | **9/9/2014** | **9/10/2014** | **9/10/2014** | **8/4/2014** | **8/4/2014** | **8/18/2014** | **8/22/2014** |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 8.4 U | 7.62 U | 4.94 U | 0.045 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | **1** | 0.762 U | 4.94 U | 0.045 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | **4** | 0.762 U | 4.94 U | 0.045 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Carbazole | 86-74-8 | NE | NE | **1.44 D** | **0.34 DJ** | **0.349 DJ** | 0.037 U | **1.37** | **4.8** | 4.94 U | 0.045 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **6.84 D** | **1.96 D** | **1.74 D** | **0.398** | **2.02** | **21.3** | **70.5 D** | **0.063** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 8.4 U | 7.62 U | 4.94 U | 0.045 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 8.4 U | 7.62 U | 4.94 U | 0.045 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | **0.75 J** | 0.762 U | 4.94 U | 0.045 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | **9.25** | 0.762 U | 4.94 U | 0.045 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Pyridine | 110-86-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.435 U | 0.431 U | 0.415 U | 0.037 U | 0.84 U | 0.762 U | 4.94 U | 0.045 U |
| Total SVOCs | TSVOC | NE | NE | **580.24** | **251.056** | **161.248** | **20.095** | **358.93** | **1670.98** | **5373.6** | **18.955** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | **0.41** | 0.026 U | **2.99** | **0.967** | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.026 U | 0.026 U | 0.024 U | 0.021 U | 0.047 U | 0.044 U | 0.029 U | 0.026 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.41** | ND | **2.99** | **0.967** | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP321** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** | **GPEC-TP322** |
| **Sample Name** | | | | **GPEC-TP321A** | **GPEC-TP321B** | **GPEC-TP321C** | **GPEC-TP321D** | **GPEC-TP322A** | **GPEC-TP322B** | **GPEC-TP322C** | **GPEC-TP322D** |
| **Start Depth** | | | | **8** | **8** | **4** | **6** | **3.5** | **7** | **5** | **6** |
| **End Depth** | | | | **8.5** | **8.5** | **4.5** | **6.5** | **4** | **7.5** | **5.5** | **6.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **9/9/2014** | **9/9/2014** | **9/10/2014** | **9/10/2014** | **8/4/2014** | **8/4/2014** | **8/18/2014** | **8/22/2014** |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 1.3 U | 0.319 U | 0.3 U | 0.053 U | **0.915 J** | 0.551 U | 1.44 U | 0.066 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | **0.038 J** | 0.044 U | 0.115 U | 0.00525 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | **0.048 J** | 0.044 U | 0.115 U | 0.00525 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | **0.503 J** | 0.044 U | 0.115 U | 0.00525 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.104 U | 0.026 U | 0.024 U | 0.00426 U | 0.047 U | 0.044 U | 0.115 U | 0.00525 U |
| Toxaphene | 8001-35-2 | NE | NE | 1.3 U | 0.319 U | 0.3 U | 0.053 U | 0.581 U | 0.551 U | 1.44 U | 0.066 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.022 U | 0.021 U | 0.021 U | 0.019 U | 0.02 U | 0.018 U | 0.024 U | 0.022 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.022 U | 0.021 U | 0.021 U | 0.019 U | 0.02 U | 0.018 U | 0.024 U | 0.022 U |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7710** | **8350** | **4920** | **1160** | **22600** | **8850** | **7580** | **8280** |
| Antimony | 7440-36-0 | NE | NE | 0.703 U | 0.689 U | 0.686 U | 0.601 U | **1.66** | 0.639 U | 0.75 U | 0.695 U |
| Arsenic | 7440-38-2 | 16 | 16 | **11.9** | **16.4** | **16.6** | **0.725** | **9.23** | **2.4** | **6.5** | **7.54** |
| Barium | 7440-39-3 | 10000 | 820 | **67.1** | **129** | **228** | **24.1** | **1000** | **64.9** | **75.7** | **166** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.465 J** | **0.541 J** | **0.566 J** | **0.763** | **13.8** | **0.601 J** | **0.414 J** | **0.995** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.261 J** | **0.355 J** | **1.1** | 0.601 U | **8.47** | **0.283 J** | **0.737 J** | **0.516 J** |
| Calcium | 7440-70-2 | NE | NE | **10500** | **8220** | **4610** | **1270** | **13100** | **1300** | **2180** | **4550** |
| Chromium | 7440-47-3 | NE | NE | **20.4** | **19.2** | **51.2** | **12.6** | **461** | **20.4** | **18.9** | **26.4** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.31 U | 1.3 U | 1.29 U | **2.61** | 1.27 UJ | 1.17 UJ | 1.5 U | 1.39 U |
| Cobalt | 7440-48-4 | NE | NE | **6.35** | **7.41** | **7.24** | **7.84** | **107** | **5.43** | **6.17** | **10.6** |
| Copper | 7440-50-8 | 10000 | 1720 | **44.2** | **95.2** | **621** | **126** | **1710** | **52.9** | **162** | **198** |
| Iron | 7439-89-6 | NE | NE | **18600** | **18500** | **19200** | **5170** | **106000** | **16200** | **19800** | **20700** |
| Lead | 7439-92-1 | 3900 | 450 | **226** | **297** | **784** | **169** | **8450** | **179** | **217** | **749** |
| Magnesium | 7439-95-4 | NE | NE | **2320** | **2310** | **1390** | **617** | **10800** | **1860** | **1860** | **2290** |
| Manganese | 7439-96-5 | 10000 | 2000 | **327** | **245** | **259** | **47.4** | **594** | **279** | **139** | **235** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.452** | **0.852** | **3.42** | 0.048 U | **0.386** | **0.233** | **0.361** | **0.789** |
| Nickel | 7440-02-0 | 10000 | 130 | **15.8** | **34.1** | **33.2** | **73.2** | **786** | **18.7** | **20.5** | **49.4** |
| Potassium | 7440-09-7 | NE | NE | **914** | **818** | **630** | **104** | **2530** | **1050** | **1080** | **871** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.98** | **2.19** | **2.25** | 0.601 U | **5.76** | **1.73** | **2.09** | **0.863** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.703 U | **0.295 J** | **0.675 J** | 0.601 U | **2.46** | **0.179 J** | **0.432 J** | **0.358 J** |
| Sodium | 7440-23-5 | NE | NE | **178** | **126** | **172** | **104** | **1340** | **130** | **53.1** | **186** |
| Thallium | 7440-28-0 | NE | NE | **0.5 J** | **0.252 J** | 0.686 U | 0.601 U | **0.362 J** | **0.226 J** | **0.384 J** | **0.491 J** |
| Vanadium | 7440-62-2 | NE | NE | **25.9** | **26.2** | **18** | **2.95** | **58.9** | **24.6** | **21.6** | **24.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **112** | **224** | **818** | **336** | **6480** | **118** | **327** | **491** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.3 U | 3.2 U | 3.2 U | 2.9 U | 3.2 U | 2.9 U | 3.8 U | 3.5 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **21500** | **31900** | **109000** | **6340** | **152000** | **19500** | **173000** | **67000** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP323 | GPEC-TP323 | GPEC-TP324 | GPEC-TP324 | GPEC-TP324 |
| | | | | Sample Name | GPEC-TP322E | GPEC-TP322F | GPEC-TP800 | GPEC-TP322G | GPEC-TP323A | GPEC-TP323B | GPEC-TP324A | GPEC-TP324B | GPEC-TP324C |
| | | | | Start Depth | 6 | 3.5 | 3.5 | 7.5 | 4 | 8 | 7 | 7.5 | 7.5 |
| | | | | End Depth | 6.5 | 4 | 4 | 8 | 4.5 | 8.5 | 7.5 | 8 | 8 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 8/25/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/1/2014 | 8/1/2014 | 7/30/2014 | 7/30/2014 | 7/30/2014 |
| | | | | Parent Sample Code | | | GPEC-TP322F | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | **4.5 J** | 0.00553 U | 0.00673 U | **0.156 DJ** | **0.78 D** | 0.00582 U |
| Toluene | 108-88-3 | 1000 | 0.7 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | **0.726 J** | 0.00553 U | 0.00673 U | **0.137 DJ** | **0.329 D** | 0.00582 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | | **22.4 D** | 0.00597 UJ | 0.00597 UJ | **77.9 J** | 0.00553 U | 0.00673 U | 0.229 U | **4.77 D** | 0.00582 U |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | **6.34 D** | 0.012 UJ | 0.012 UJ | **36.8 J** | 0.011 U | 0.014 U | 0.458 U | **1.8 D** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | | **28.74** | ND | ND | **119.926** | ND | ND | **0.293** | **7.679** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 4.76 U | 0.03 UJ | 0.03 UJ | 4.83 UJ | 0.028 U | 0.034 U | 0.458 U | 0.49 U | 0.029 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 47.6 U | 0.119 UJ | 0.119 UJ | 48.3 UJ | 0.111 U | 0.135 U | 4.58 U | 4.9 U | 0.116 U |
| Acrylonitrile | 107-13-1 | NE | NE | | 47.6 U | 0.119 UJ | 0.119 UJ | 48.3 UJ | 0.111 U | 0.135 U | 4.58 U | 4.9 U | 0.116 U |
| Bromodichloromethane | 75-27-4 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Bromoform | 75-25-2 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Bromomethane | 74-83-9 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 4.76 U | 0.024 UJ | 0.024 UJ | 4.83 R | 0.022 U | 0.027 U | 0.458 U | 0.49 U | 0.023 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Chloroethane | 75-00-3 | NE | 1.9 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Chloroform | 67-66-3 | 700 | 0.37 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Chloromethane | 74-87-3 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Dibromochloromethane | 124-48-1 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | **0.159 DJ** | 0.245 U | 0.00582 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Diisopropyl ether | 108-20-3 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 2-Hexanone | 591-78-6 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | 4.76 U | 0.012 UJ | 0.012 UJ | 4.83 UJ | 0.011 U | 0.014 U | 0.458 U | 0.49 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | **0.347 D** | 0.245 U | 0.00582 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | **0.177 DJ** | 0.245 U | 0.00582 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | **1.01 D** | 0.245 U | 0.00582 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Vinyl acetate | 108-05-4 | NE | NE | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 2.38 U | 0.00597 UJ | 0.00597 UJ | 2.41 UJ | 0.00553 U | 0.00673 U | 0.229 U | 0.245 U | 0.00582 U |
| Total VOCs | TVOC | NE | NE | | **28.74** | ND | ND | **119.926** | ND | ND | **1.986** | **7.679** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | **51.1 D** | **0.591 J** | **1.18** | **90.1** | 0.035 U | **0.211** | 0.038 U | **10.8 D** | **0.421** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | **7.88 D** | **6.77 J** | **11.1** | **18.8** | 0.035 U | **0.086** | 0.038 U | **1.79 D** | **0.247** |
| Anthracene | 120-12-7 | 1000 | 1000 | | **37.9 D** | **7.15 J** | **13 J** | **75.7** | 0.035 U | **0.388** | **0.091** | **6.81 D** | **0.98** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | **9.84 D** | **17.7 J** | **9.61 J** | **19.4** | 0.035 U | **0.576** | **0.784** | **1.94 D** | **0.785** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | **53.6 D** | **11.8 J** | **13.4** | **127** | **0.053** | **2.18** | **1.1** | **16.5 D** | **4.52** |
| Fluorene | 86-73-7 | 1000 | 386 | | **64.2 D** | **2.04 J** | **3.91 J** | **140** | 0.035 U | **0.185** | **0.028 J** | **13.6 D** | **0.799** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | **189 D** | **0.651** | **1.05** | **312** | **0.104** | **0.059** | 0.038 U | **9.2 D** | **0.097** |
| Naphthalene | 91-20-3 | 1000 | 12 | | **323 D** | **0.818** | **1.34** | **429** | **0.083** | **0.103** | 0.038 U | **22.6 D** | **0.122** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | **212 D** | **6.88 J** | **7.72** | **471** | **0.134** | **1.23** | **0.465** | **46.9 D** | **3.78** |
| Pyrene | 129-00-0 | 1000 | 1000 | | **97.1 D** | **29.1** | **28.6** | **203** | **0.056** | **2.08** | **0.962** | **20.6 D** | **4.28** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | **29 D** | **17.1 J** | **19.8** | **70.1** | **0.036** | **1.12** | **0.528** | **8.05 D** | **2.35** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | **23.1 D** | **17.5 J** | **24.4** | **61.4** | 0.035 U | **1.73** | **1.05** | **10.2 D** | **3.19** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | **8.46 D** | **19.5 J** | **21.1** | **35.4** | 0.035 U | **1.43** | **1.15** | **6.15 D** | **3.26** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | **14.1 D** | **12.9 J** | **13.8** | **40** | 0.035 U | **1.81** | **1.02** | **6.06 D** | **2.65** |
| Chrysene | 218-01-9 | 110 | 1 | | **29.7 D** | **21.1 J** | **21.8** | **78.5** | **0.05** | **1.32** | **0.756** | **8.68 D** | **2.42** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | **2.75 D** | **5.2 J** | **5.22** | **7.36** | 0.035 U | **0.265** | **0.299** | **0.782 D** | **0.239** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | **8.73 D** | **15.2 J** | **9.5** | **19.3** | 0.035 U | **0.635** | **0.727** | **2.36 D** | **0.878** |
| Total PAHs | TPAH | NE | NE | | **1161.46** | **192** | **206.53** | **2198.06** | **0.516** | **15.408** | **8.96** | **193.022** | **31.018** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP323 | GPEC-TP323 | GPEC-TP324 | GPEC-TP324 | GPEC-TP324 |
| | | | Sample Name | GPEC-TP322E | GPEC-TP322F | GPEC-TP800 | GPEC-TP322G | GPEC-TP323A | GPEC-TP323B | GPEC-TP324A | GPEC-TP324B | GPEC-TP324C |
| | | | Start Depth | 6 | 3.5 | 3.5 | 7.5 | 4 | 8 | 7 | 7.5 | 7.5 |
| | | | End Depth | 6.5 | 4 | 4 | 8 | 4.5 | 8.5 | 7.5 | 8 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/25/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/1/2014 | 8/1/2014 | 7/30/2014 | 7/30/2014 | 7/30/2014 |
| | | | Parent Sample Code | | | GPEC-TP322F | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 1.88 U | 0.597 UJ | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 1.88 U | 0.597 UJ | 0.119 UJ | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 1.88 U | 0.597 UJ | 0.119 UJ | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 1.88 U | 0.597 UJ | 0.119 UJ | 1.21 U | 0.035 U | 0.044 U | **0.107** | 0.196 U | **0.18** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 1.88 U | 0.597 UJ | 0.119 UJ | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | 1.88 U | 0.597 U | 0.119 U | **6.15** | 0.035 U | 0.044 U | **0.053** | 0.196 U | **0.144** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **11.6 D** | 0.597 U | **0.491** | **25.8** | **0.051** | **0.085** | 0.038 U | **1.76 D** | **0.294** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 1.88 U | 0.597 UJ | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.88 U | 0.597 UJ | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 1.88 U | 0.597 UJ | 0.119 UJ | 1.21 UJ | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 1.88 U | 0.597 UJ | 0.119 U | 1.21 UJ | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 1.88 U | 0.597 U | 0.119 U | 1.21 U | 0.035 U | 0.044 U | 0.038 U | 0.196 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **1173.06** | **192** | **207.021** | **2230.01** | **0.567** | **15.493** | **9.12** | **194.782** | **31.636** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | **0.124** |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.021 U | 0.025 U | 0.021 U | 0.024 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | **0.124** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP322 | GPEC-TP323 | GPEC-TP323 | GPEC-TP324 | GPEC-TP324 | GPEC-TP324 |
| | | | Sample Name | GPEC-TP322E | GPEC-TP322F | GPEC-TP800 | GPEC-TP322G | GPEC-TP323A | GPEC-TP323B | GPEC-TP324A | GPEC-TP324B | GPEC-TP324C |
| | | | Start Depth | 6 | 3.5 | 3.5 | 7.5 | 4 | 8 | 7 | 7.5 | 7.5 |
| | | | End Depth | 6.5 | 4 | 4 | 8 | 4.5 | 8.5 | 7.5 | 8 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/25/2014 | 8/28/2014 | 8/28/2014 | 8/28/2014 | 8/1/2014 | 8/1/2014 | 7/30/2014 | 7/30/2014 | 7/30/2014 |
| | | | Parent Sample Code | | | GPEC-TP322F | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.288 U | **0.483 J** | **0.125 J** | **0.162 J** | 0.051 U | 0.062 U | **0.035 J** | 0.061 U | **0.083** |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.023 U | **0.051 J** | **0.018 J** | **0.015 J** | 0.00411 U | 0.00494 U | **0.00504** | 0.00486 U | **0.00784** |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.023 U | **0.043 J** | **0.013 J** | **0.024 J** | 0.00411 U | 0.00494 U | **0.00306 J** | 0.00486 U | **0.00743** |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | **0.00442** | **0.00522** | **0.00654** |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | **0.00466** | 0.00486 U | 0.00456 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.023 U | **0.099 J** | 0.00459 UJ | **0.063 J** | 0.00411 U | 0.00494 U | **0.00387 J** | **0.01** | **0.00711** |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | **0.0056** |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.023 U | 0.00474 U | 0.00459 U | 0.00451 U | 0.00411 U | 0.00494 U | 0.00427 U | 0.00486 U | 0.00456 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.288 U | 0.059 U | 0.057 U | 0.056 U | 0.051 U | 0.062 U | 0.053 U | 0.061 U | 0.057 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.018 U | 0.022 U | 0.019 U | 0.02 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.018 U | 0.022 U | 0.019 U | 0.02 U | 0.019 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8770** | **8760** | **8620** | **10000** | **5140** | **10200** | **5110** | **7640** | **6390** |
| Antimony | 7440-36-0 | NE | NE | 0.652 U | **0.64** | **1.6** | **0.759** | 0.611 U | 0.737 U | 0.596 U | 0.655 U | 0.622 U |
| Arsenic | 7440-38-2 | 16 | 16 | **5.63** | **17.7** | **14.2** | **7.37** | **3.09** | **23.9** | **16** | **12.1** | **3.79** |
| Barium | 7440-39-3 | 10000 | 820 | **81.2** | **583 J** | **312 J** | **286** | **28.5** | **365** | **112** | **139** | **86.8** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.808** | **1.21** | **0.879** | **0.818** | **0.304 J** | **0.552 J** | **0.603** | **0.513 J** | **0.57 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.313 J** | **5.43** | **4.08** | **1.43** | 0.611 U | **2.74** | **0.716** | **0.54 J** | **0.284 J** |
| Calcium | 7440-70-2 | NE | NE | **3820** | **6160** | **4170** | **8210** | **2030** | **4560** | **1140** | **5050** | **14900** |
| Chromium | 7440-47-3 | NE | NE | **23.8** | **58.8 J** | **30.3 J** | **25** | **7.83** | **19.9** | **16.8** | **18** | **15.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 1.19 U | 1.19 U | 1.21 U | 1.11 U | 1.35 U | 1.15 U | 1.22 U | 1.16 U |
| Cobalt | 7440-48-4 | NE | NE | **9.52** | **13.2** | **9.79** | **9** | **4.04** | **5.77** | **5.84** | **6.54** | **5.87** |
| Copper | 7440-50-8 | 10000 | 1720 | **84** | **439 J** | **248 J** | **147** | **11.8** | **45.4** | **111** | **303** | **38.1** |
| Iron | 7439-89-6 | NE | NE | **28900** | **23600** | **21600** | **19800** | **18300** | **21100** | **20400** | **19400** | **14100** |
| Lead | 7439-92-1 | 3900 | 450 | **173** | **2460 J** | **1350 J** | **656** | **41.6** | **951** | **200** | **299** | **94.1** |
| Magnesium | 7439-95-4 | NE | NE | **2840** | **2990** | **2550** | **2810** | **1260** | **2370** | **1490** | **2320** | **3770** |
| Manganese | 7439-96-5 | 10000 | 2000 | **526** | **317** | **254** | **247** | **224** | **259** | **191** | **344** | **202** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.447** | **0.721** | **0.621** | **0.402** | **0.482** | **2.2** | **0.463** | 0.057 U | **0.575** |
| Nickel | 7440-02-0 | 10000 | 130 | **25.1** | **68.8** | **45** | **40.2** | **8.61** | **13.7** | **15.4** | **18.8** | **20.8** |
| Potassium | 7440-09-7 | NE | NE | **1250** | **839 J** | **942 J** | **995 J** | **856** | **876** | **590** | **911** | **935** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.8** | **2.22** | **1.69** | **2.86** | **0.881** | **3.3** | **1.33** | **2.02** | **1.19** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.652 U | **0.623** | **0.466 J** | **0.211 J** | 0.611 U | 0.737 U | 0.596 U | **0.385 J** | 0.622 U |
| Sodium | 7440-23-5 | NE | NE | **105** | **140** | **178** | **211** | **151** | **127** | **74.7** | **113** | **213** |
| Thallium | 7440-28-0 | NE | NE | **0.808** | **0.529 J** | **0.235 J** | **0.164 J** | 0.611 U | 0.737 U | 0.596 U | 0.655 U | 0.622 U |
| Vanadium | 7440-62-2 | NE | NE | **36.3** | **36.4** | **26.7** | **26.7** | **14** | **25.5** | **21** | **25.1** | **23** |
| Zinc | 7440-66-6 | 10000 | 2480 | **155** | **3800** | **2480** | **736** | **31.2** | **1190** | **239** | **479** | **116** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3 U | 3 U | 3 U | 2.8 U | 3.4 U | 2.9 U | 3.1 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **73200** | **64500** | **54400** | **42300** | **31100** | **68400** | **11100** | **121000** | **15400** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP325 | GPEC-TP325 | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP326 |
| | | | Sample Name | GPEC-TP325A | GPEC-TP325B | GPEC-TP325C | GPEC-TP325D | GPEC-TP325E | GPEC-TP325F | GPEC-TP325G | GPEC-TP825G | GPEC-TP326E |
| | | | Start Depth | 3 | 4 | 9.5 | 8 | 8.5 | 8 | 4 | 4 | 7.5 |
| | | | End Depth | 3.5 | 4.5 | 10 | 8.5 | 9 | 8.5 | 4.5 | 4.5 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/25/2014 | 7/25/2014 | 9/15/2014 | 9/15/2014 | 9/15/2014 | 9/16/2014 | 9/16/2014 | 9/16/2014 | 7/29/2014 |
| | | | Parent Sample Code | | | | | | | | GPEC-TP325G | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00592 U | 0.00608 U | **1.82 DJ** | 2.48 U | 0.62 U | **0.506** | 0.00591 U | 0.00594 U | 0.00573 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00592 U | 0.00608 U | **53.1 D** | **9.13 D** | **2.97 D** | **0.469** | 0.00591 U | 0.00594 U | 0.00573 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | **0.021 D** | **18.8 D** | **3.13 DJ** | **1.15 DJ** | 0.27 U | 0.012 U | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.021** | **73.72** | **12.26** | **4.12** | **0.975** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.03 U | 0.03 U | 5.01 U | 4.96 U | 1.24 U | 0.27 U | 0.03 U | 0.03 U | 0.029 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.118 U | 0.122 U | 50.1 U | 49.6 U | 12.4 U | 2.7 U | 0.118 U | 0.119 U | 0.115 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.118 U | 0.122 U | 50.1 U | 49.6 U | 12.4 U | 2.7 U | 0.118 U | 0.119 U | 0.115 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Bromoform | 75-25-2 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.024 U | 5.01 U | 4.96 U | 1.24 U | 0.27 U | 0.059 U | 0.059 U | 0.023 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00592 U | **0.011 D** | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.012 U | 5.01 U | 4.96 U | 1.24 U | 0.27 U | 0.012 U | 0.012 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00592 U | **0.019 D** | 5.01 U | 4.96 U | 1.24 U | 0.27 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00592 U | 0.00608 U | 2.5 U | 2.48 U | 0.62 U | 0.135 U | 0.00591 U | 0.00594 U | 0.00573 U |
| Total VOCs | TVOC | NE | NE | ND | **0.051** | **73.72** | **12.26** | **4.12** | **0.975** | ND | ND | ND |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.407 D** | **2.09 D** | **31.7 D** | **38.8 D** | **12.6 D** | **4.62 D** | **0.344** | **1.94 D** | **0.106** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **1.52 D** | **0.946 D** | **3.54 D** | **4.33 D** | 2.01 U | **0.383 DJ** | **0.674** | **0.924 D** | **0.195** |
| Anthracene | 120-12-7 | 1000 | 1000 | **2.29 D** | **2.28 D** | **26.5 D** | **17.1 D** | **5.93 D** | **4.2 D** | **1.06** | **2.93 D** | **0.397** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **4.59 D** | **1.05 D** | **3.95 D** | **1.96 DJ** | 2.01 U | **1.44 D** | **1.76** | **1.07 D** | **1.29** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **9.21 D** | **3.27 D** | **44.8 D** | **24.4 D** | **7.7 D** | **10.4 D** | **3.14** | **5.34 D** | **1.92** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.852 D** | **3.27 D** | **40 D** | **42.2 D** | **12.1 D** | **4.01 D** | **0.732** | **3.52 D** | **0.137** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.196 U | 0.201 U | **140 D** | **320 D** | **116 D** | **5.51 D** | **1.32** | **1.2 D** | **0.087** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.196 U | 0.201 U | **338 D** | **231 D** | **330 D** | **51 D** | **1.91** | **1.49 D** | **0.16** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.962 D** | **6.41 D** | **134 D** | **122 D** | **33.7 D** | **15.1 D** | **2.99** | **12.7 D** | **1.24** |
| Pyrene | 129-00-0 | 1000 | 1000 | **29 D** | **4.83 D** | **62.3 D** | **38.7 D** | **11.8 D** | **10.7 D** | **4.4** | **7.68 D** | **1.77** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **5.37 D** | **1.71 D** | **25.7 D** | **12.5 D** | **3.86 D** | **4.51 D** | **2.61** | **3.28 D** | **1.02** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **13.8 D** | **2.47 D** | **17.3 D** | **8.17 D** | **2.72 D** | **3.58 D** | **3.44** | **3.2 D** | **1.87** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **8.26 D** | **1.58 D** | **10.8 D** | **4.53 D** | **1.41 DJ** | **2.66 D** | **2.59** | **1.87 D** | **1.29** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **5.01 D** | **1.25 D** | **10.9 D** | **5.51 D** | **1.88 DJ** | **2.58 D** | **1.73** | **2.1 D** | **1.43** |
| Chrysene | 218-01-9 | 110 | 1 | **6.12 D** | **1.7 D** | **24.7 D** | **13.1 D** | **4.31 D** | **4.27 D** | **3** | **3.33 D** | **1.12** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.85 D** | **0.29 D** | **1.39 DJ** | 1.98 U | 2.01 U | **0.466 D** | **0.656** | **0.531 D** | **0.372** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **3.87 D** | **0.817 D** | **4.61 D** | **1.46 DJ** | 2.01 U | **1.45 D** | **1.44** | **1.21 D** | **1.08** |
| Total PAHs | TPAH | NE | NE | **93.111** | **33.963** | **920.19** | **885.76** | **544.01** | **126.879** | **33.796** | **54.315** | **15.484** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP325 | GPEC-TP325 | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP326 |
| | | | Sample Name | GPEC-TP325A | GPEC-TP325B | GPEC-TP325C | GPEC-TP325D | GPEC-TP325E | GPEC-TP325F | GPEC-TP325G | GPEC-TP825G | GPEC-TP326E |
| | | | Start Depth | 3 | 4 | 9.5 | 8 | 8.5 | 8 | 4 | 4 | 7.5 |
| | | | End Depth | 3.5 | 4.5 | 10 | 8.5 | 9 | 8.5 | 4.5 | 4.5 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/25/2014 | 7/25/2014 | 9/15/2014 | 9/15/2014 | 9/15/2014 | 9/16/2014 | 9/16/2014 | 9/16/2014 | 7/29/2014 |
| | | | Parent Sample Code | | | | | | | | GPEC-TP325G | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 1.96 U | 2.01 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | **0.053** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.196 U | 0.201 U | **2.83 D** | **1.26 DJ** | 2.01 U | **1.22 D** | **0.059** | 0.195 U | **0.096** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.225 D** | **0.907 D** | **12.2 D** | **15.2 D** | **1.82 DJ** | **2.3 D** | **0.22** | **0.747 D** | **0.073** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.96 U | 2.01 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.96 U | 2.01 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.196 U | 0.201 U | 2.05 U | 1.98 U | 2.01 U | 0.433 U | 0.039 U | 0.195 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | **93.336** | **34.87** | **935.22** | **902.22** | **545.83** | **130.399** | **34.075** | **55.062** | **15.706** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.0098 U | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.0098 U | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.0098 U | **0.036** | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.0098 U | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | **0.052 D** | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.0098 U | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.0098 U | 0.00199 U | 0.047 U | 0.048 U | 0.048 U | 0.052 U | 0.047 U | 0.048 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.052 D** | **0.065** | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP325 | GPEC-TP325 | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP325EX | GPEC-TP326 |
| | | | Sample Name | GPEC-TP325A | GPEC-TP325B | GPEC-TP325C | GPEC-TP325D | GPEC-TP325E | GPEC-TP325F | GPEC-TP325G | GPEC-TP825G | GPEC-TP326E | |
| | | | Start Depth | 3 | 4 | 9.5 | 8 | 8.5 | 8 | 4 | 4 | 7.5 | |
| | | | End Depth | 3.5 | 4.5 | 10 | 8.5 | 9 | 8.5 | 4.5 | 4.5 | 8 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/25/2014 | 7/25/2014 | 9/15/2014 | 9/15/2014 | 9/15/2014 | 9/16/2014 | 9/16/2014 | 9/16/2014 | 7/29/2014 | |
| | | | Parent Sample Code | | | | | | | | GPEC-TP325G | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.049 U | 0.025 U | 0.296 U | 0.297 U | 0.299 U | 0.324 U | 0.295 U | 0.297 U | 0.056 U | |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00392 U | **0.00204 D** | 0.024 U | 0.024 U | 0.024 U | 0.026 U | **0.029 D** | 0.024 U | **0.00381 J** | |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00392 U | 0.00199 U | 0.024 U | 0.024 U | 0.024 U | 0.026 U | 0.024 U | 0.024 U | 0.00449 U | |
| Toxaphene | 8001-35-2 | NE | NE | 0.049 U | 0.025 U | 0.296 U | 0.297 U | 0.299 U | 0.324 U | 0.295 U | 0.297 U | 0.056 U | |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.02 U | 0.02 U | 0.021 U | 0.02 U | 0.022 U | 0.019 U | 0.019 U | 0.019 U | |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.02 U | 0.02 U | 0.021 U | 0.02 U | 0.022 U | 0.019 U | 0.019 U | 0.019 U | |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **1040** | **2260** | **6340** | **4440** | **5790** | **5680** | **8400** | **7810** | **7280** | |
| Antimony | 7440-36-0 | NE | NE | 0.63 U | 0.649 U | 0.654 U | 0.643 U | 0.646 U | 0.727 U | 0.59 U | 0.63 U | 0.599 U | |
| Arsenic | 7440-38-2 | 16 | 16 | **8.29** | **1.31** | **127** | **10.8** | **37.2** | **11.8** | **73.8** | **104** | **5.19** | |
| Barium | 7440-39-3 | 10000 | 820 | **11.1** | **16.5** | **111** | **33.7** | **256** | **56.4** | **217** | **207** | **94** | |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.63 U | **0.699** | **0.421 J** | **0.356 J** | **0.435 J** | **0.446 J** | **11.9** | **3.28** | **0.457 J** | |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.191 J** | 0.649 U | **0.558 J** | 0.643 U | **0.339 J** | 0.727 U | **2.07** | **2.32** | **0.235 J** | |
| Calcium | 7440-70-2 | NE | NE | **640** | **494** | **6340** | **3190** | **7040** | **2360** | **3210** | **2060** | **894** | |
| Chromium | 7440-47-3 | NE | NE | **5.43** | **13.1** | **20.5** | **11** | **19.6** | **12.1** | **125** | **57.6** | **17.6** | |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 U | 1.22 U | 1.25 U | 1.24 U | 1.24 U | 1.35 U | 1.18 U | 1.19 U | 1.15 U | |
| Cobalt | 7440-48-4 | NE | NE | **1.78** | **2.64** | **7.75** | **6.79** | **6** | **5.08** | **30** | **13.9** | **6.78** | |
| Copper | 7440-50-8 | 10000 | 1720 | **19.7** | **39.4** | **107** | **19.4** | **73.4** | **23.6** | **651** | **296** | **51.5** | |
| Iron | 7439-89-6 | NE | NE | **8400** | **4720** | **36200** | **14400** | **21600** | **11800** | **65200 D** | **74200 D** | **19300** | |
| Lead | 7439-92-1 | 3900 | 450 | **66.4** | **53.2** | **461** | **8.64** | **250** | **136** | **1620** | **1190** | **99.3** | |
| Magnesium | 7439-95-4 | NE | NE | **615** | **537** | **1590** | **2600** | **1580** | **2110** | **2550** | **1950** | **2180** | |
| Manganese | 7439-96-5 | 10000 | 2000 | **47** | **48.6** | **387** | **3030** | **306** | **159** | **532** | **441** | **186** | |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.053 U | 0.053 U | **0.784** | 0.057 U | **0.258** | 0.058 U | **0.683** | **0.84** | 0.055 U | |
| Nickel | 7440-02-0 | 10000 | 130 | **6.91** | **13.1** | **23.9** | **20.4** | **14.1** | **19.4** | **249** | **78.5** | **13.6** | |
| Potassium | 7440-09-7 | NE | NE | **99.3** | **156** | **662** | **1150** | **861** | **829** | **814** | **802** | **855** | |
| Selenium | 7782-49-2 | 6800 | 4 | 0.63 U | 0.649 U | **1.19** | **1.22** | **1.44** | **0.811** | **1.98** | **1.35** | **1.27** | |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.63 U | 0.649 U | 0.654 U | 0.643 U | 0.646 U | 0.727 U | **0.651** | **0.356 J** | 0.599 U | |
| Sodium | 7440-23-5 | NE | NE | **44.2** | **63.8** | **122** | **183** | **130** | **141** | **342** | **166** | **75.1** | |
| Thallium | 7440-28-0 | NE | NE | 0.63 U | 0.649 U | **0.25 J** | **0.175 J** | 0.646 U | 0.727 U | **0.236 J** | **0.262 J** | **0.155 J** | |
| Vanadium | 7440-62-2 | NE | NE | **2.88** | **5.1** | **20.4** | **18.4** | **24.3** | **17.4** | **27.3** | **25.6** | **24.7** | |
| Zinc | 7440-66-6 | 10000 | 2480 | **90.8** | **123** | **181** | **31.2** | **166** | **60.4** | **2150** | **783** | **110** | |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3 U | 3.1 U | 3.1 U | 3.1 U | 3.4 U | 3 U | 3 U | 2.9 U | |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Organic Carbon | TOC | NE | NE | **30900** | **9320** | **130000** | **8140** | **56700** | **17000** | **39400** | **20400** | **9980** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP326 | GPEC-TP326 | GPEC-UST1 | GPEC-UST1 | GPEC-UST2 | GPEC-UST2 | GPEC-SB/PZ-304 | GPEC-SB/PZ-304 | |
| | | | Sample Name | GPEC-TP326NE | GPEC-TP326W | GPEC-UST1A | GPEC-UST1B | GPEC-UST2A | GPEC-UST2B | GPEC-SB/PZ304 (1.5-2) | GPEC-SB/PZ304 (15-16) | |
| | | | Start Depth | 8 | 7.5 | 5 | 5 | 5 | 5 | 1.5 | 15 | |
| | | | End Depth | 8.5 | 8 | 5.5 | 5.5 | 5.5 | 5.5 | 2 | 16 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/29/2014 | 7/29/2014 | 8/12/2014 | 8/12/2014 | 8/13/2014 | 8/13/2014 | 3/18/2015 | 3/31/2015 | |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | **18.7 J** | |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | **35.7 J** | |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | **893 J** | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.012 U | 0.013 U | 0.012 U | 0.013 U | 0.012 U | 0.011 U | **1190 J** | |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND | **2137.4** | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.03 U | 0.029 U | 0.031 U | 0.029 U | 0.031 U | 0.03 U | 0.028 U | 13.2 UJ | |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.118 U | 0.117 U | 0.126 U | 0.115 U | 0.125 U | 0.119 U | 0.113 U | 132 R | |
| Acrylonitrile | 107-13-1 | NE | NE | 0.118 U | 0.117 U | 0.126 U | 0.115 U | 0.125 U | 0.119 U | 0.113 U | 132 UJ | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Bromoform | 75-25-2 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 13.2 UJ | |
| Bromomethane | 74-83-9 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.011 U | 6.61 UJ | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.023 U | 0.025 U | 0.023 U | 0.025 U | 0.024 U | 0.023 U | 13.2 R | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.011 U | 6.61 UJ | |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Chloromethane | 74-87-3 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.012 U | 0.013 U | 0.012 U | 0.013 U | 0.012 U | **0.012 CD** | 13.2 UJ | |
| Styrene | 100-42-5 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00591 U | 0.00584 U | 0.00628 U | 0.00575 U | 0.00624 U | 0.00596 U | 0.00563 U | 6.61 UJ | |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | ND | ND | ND | **0.012** | **2137.4** | |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.049** | **0.062** | 0.04 U | **0.12** | 0.041 U | 0.039 U | **0.28** | **29.8** | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.171** | **0.08** | **0.025 J** | **0.334** | **0.08** | 0.039 U | **0.549** | **17.9** | |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.225** | **0.173** | **0.108** | **1.16** | **0.169** | **0.066** | **1.08** | **29.4** | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.26** | **0.731** | **0.112** | **0.439** | **0.153** | **0.409** | **1.52** | **9.74** | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.998** | **0.827** | **0.484** | **3.99** | **0.761** | **0.722** | **5.05** | **29** | |
| Fluorene | 86-73-7 | 1000 | 386 | **0.082** | **0.07** | **0.027 J** | **0.144** | **0.038 J** | 0.039 U | **0.378** | **44.8** | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.053** | **0.056** | **0.143** | **0.216** | **0.039 J** | 0.039 U | **0.194** | **131** | |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.11** | **0.114** | **0.14** | **0.194** | **0.058** | 0.039 U | **0.212** | **164** | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.713** | **0.64** | **0.306** | **1.7** | **0.439** | **0.328** | **3.2** | **93.5** | |
| Pyrene | 129-00-0 | 1000 | 1000 | **1.14** | **0.936** | **0.523** | **3.85** | **0.83** | **1.03** | **4.57** | **54.4** | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.677** | **0.533** | **0.343** | **2.56** | **0.538** | **0.527** | **2.42** | **20.3** | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.44** | **1.02** | **0.349** | **2.22** | **0.482** | **0.545** | **2.78** | **20.3** | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.961** | **0.709** | **0.341** | **2.43** | **0.488** | **0.504** | **2.26** | **11.4** | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.13** | **0.727** | **0.298** | **2.54** | **0.462** | **0.466** | **1.93** | **12.1** | |
| Chrysene | 218-01-9 | 110 | 1 | **0.769** | **0.589** | **0.4** | **2.75** | **0.623** | **0.604** | **2.58** | **21.6** | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.288** | **0.191** | **0.024 J** | **0.29** | **0.066** | **0.124** | **0.613** | **4.37** | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.972** | **0.588** | **0.123** | **0.603** | **0.176** | **0.346** | **1.31** | **7.72** | |
| Total PAHs | TPAH | NE | NE | **11.038** | **8.046** | **3.746** | **25.54** | **5.402** | **5.671** | **30.926** | **701.33** | |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP326 | GPEC-TP326 | GPEC-UST1 | GPEC-UST1 | GPEC-UST2 | GPEC-UST2 | GPEC-SB/PZ-304 | GPEC-SB/PZ-304 |
| | | | Sample Name | GPEC-TP326NE | GPEC-TP326W | GPEC-UST1A | GPEC-UST1B | GPEC-UST2A | GPEC-UST2B | GPEC-SB/PZ304 (1.5-2) | GPEC-SB/PZ304 (15-16) |
| | | | Start Depth | 8 | 7.5 | 5 | 5 | 5 | 5 | 1.5 | 15 |
| | | | End Depth | 8.5 | 8 | 5.5 | 5.5 | 5.5 | 5.5 | 2 | 16 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/29/2014 | 7/29/2014 | 8/12/2014 | 8/12/2014 | 8/13/2014 | 8/13/2014 | 3/18/2015 | 3/31/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 UJ |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.078** | **0.029 J** | 0.04 U | **0.568** | **0.08** | 0.039 U | **0.484** | 1.3 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Carbazole | 86-74-8 | NE | NE | **0.062** | **0.051** | 0.04 U | **0.148** | **0.036 J** | **0.027 J** | **0.168** | **1.17 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.033 J** | **0.04** | 0.04 U | **0.062** | 0.041 U | 0.039 U | **0.12** | **5.2** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | **0.039** | 0.039 U | 0.04 U | 0.037 U | 0.041 U | **0.031 J** | 0.037 U | 1.3 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.039 U | 0.04 U | 0.037 U | 0.041 U | 0.039 U | 0.037 U | 1.3 U |
| Total SVOCs | TSVOC | NE | NE | **11.25** | **8.166** | **3.746** | **26.318** | **5.518** | **5.729** | **31.698** | **707.7** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.023 U | 0.025 U | 0.022 U | 0.025 U | 0.023 U | 0.022 U | 0.098 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-TP326 | GPEC-TP326 | GPEC-UST1 | GPEC-UST1 | GPEC-UST2 | GPEC-UST2 | GPEC-SB/PZ-304 | GPEC-SB/PZ-304 |
| | | | Sample Name | GPEC-TP326NE | GPEC-TP326W | GPEC-UST1A | GPEC-UST1B | GPEC-UST2A | GPEC-UST2B | GPEC-SB/PZ304 (1.5-2) | GPEC-SB/PZ304 (15-16) |
| | | | Start Depth | 8 | 7.5 | 5 | 5 | 5 | 5 | 1.5 | 15 |
| | | | End Depth | 8.5 | 8 | 5.5 | 5.5 | 5.5 | 5.5 | 2 | 16 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/29/2014 | 7/29/2014 | 8/12/2014 | 8/12/2014 | 8/13/2014 | 8/13/2014 | 3/18/2015 | 3/31/2015 |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | **0.038 J** | 0.056 U | 0.062 U | **0.149** | 0.062 U | 0.057 U | 0.055 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | **0.00449** | 0.0045 U | 0.00494 U | **0.018** | **0.003 J** | 0.00458 U | 0.00439 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.00366 J** | 0.0045 U | 0.00494 U | **0.019** | **0.0037 J** | 0.00458 U | 0.00439 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | **0.00535** | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | **0.014** | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00449 U | 0.0045 U | 0.00494 U | **0.02** | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | **0.00849** | 0.0045 U | 0.00494 U | **0.054** | **0.00375 J** | 0.00458 U | **0.00507** | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00449 U | 0.0045 U | 0.00494 U | **0.00568** | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00449 U | 0.0045 U | 0.00494 U | **0.00455** | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00449 U | 0.0045 U | 0.00494 U | 0.00442 U | 0.00496 U | 0.00458 U | 0.00439 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.056 U | 0.056 U | 0.062 U | 0.055 U | 0.062 U | 0.057 U | 0.055 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.021 U | 0.02 U | 0.933 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.021 U | 0.02 U | 0.933 U | NA |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4170** | **8500** | **10200** | **9260** | **11100** | **13300** | **9700** | **6890** |
| Antimony | 7440-36-0 | NE | NE | 0.59 U | 0.628 U | 0.682 U | 0.614 U | **4.58** | **0.71** | **5.55** | **2.74** |
| Arsenic | 7440-38-2 | 16 | 16 | **5.19** | **6.59** | **20.4** | **23.8** | **41.8** | **26.7** | **9.46** | **6.98** |
| Barium | 7440-39-3 | 10000 | 820 | **90.3** | **95.5** | **127** | **144** | **268** | **473** | **262** | **88.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.971** | **0.578 J** | **0.794** | **0.869** | **0.656** | **0.713** | **2.95** | **2.04** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.629** | **0.262 J** | **0.725** | **1.07** | **0.809** | **0.374 J** | **1.17** | **0.326 J** |
| Calcium | 7440-70-2 | NE | NE | **953** | **1280** | **2900** | **2410** | **3320** | **2980** | **6720** | **10900** |
| Chromium | 7440-47-3 | NE | NE | **19.5** | **26.9** | **26.5** | **25.7** | **78.3** | **30.2** | **93.5** | **26** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 U | 1.17 U | 1.26 U | 1.15 U | 1.25 U | 1.19 U | **9.5** | 1.32 U |
| Cobalt | 7440-48-4 | NE | NE | **5.52** | **6.2** | **8.33** | **6.1** | **7.04** | **8.14** | **23.6** | **10.6** |
| Copper | 7440-50-8 | 10000 | 1720 | **244** | **51.7** | **426** | **289** | **98.2** | **226** | **482** | **294** |
| Iron | 7439-89-6 | NE | NE | **13900** | **22900** | **26800** | **22700** | **20600** | **19000** | **34500** | **25500** |
| Lead | 7439-92-1 | 3900 | 450 | **260** | **161** | **262** | **380** | **866** | **361** | **2550** | **435** |
| Magnesium | 7439-95-4 | NE | NE | **1200** | **2440** | **3220** | **2210** | **2300** | **2390** | **3230** | **3940** |
| Manganese | 7439-96-5 | 10000 | 2000 | **117** | **251** | **455** | **300** | **331** | **559** | **366** | **329** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.059 U | 0.056 U | **9.42** | 0.058 U | **15.5** | **5.87** | **1.3** | **0.721** |
| Nickel | 7440-02-0 | 10000 | 130 | **26.8** | **15.3** | **25.3** | **27.3** | **17.8** | **22.6** | **187** | **58.9** |
| Potassium | 7440-09-7 | NE | NE | **457** | **890** | **1620** | **684** | **980** | **1010** | **966** | **817** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.35** | **1.39** | **1.23** | **1.71** | **1.99** | **1.93** | **2.6** | **1.24** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.191 J** | 0.628 U | **0.778** | **0.928** | **0.674** | **0.91** | **0.931** | **0.383 J** |
| Sodium | 7440-23-5 | NE | NE | **75.5** | **99.5** | **188** | **134** | **162** | **1070** | **398** | **238** |
| Thallium | 7440-28-0 | NE | NE | 0.59 U | 0.628 U | **0.207 J** | 0.614 U | 0.651 U | 0.61 U | 0.593 U | 0.693 U |
| Vanadium | 7440-62-2 | NE | NE | **21.1** | **26.4** | **36.6** | **29.3** | **29.6** | **25.8** | **32.4** | **26.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **322** | **109** | **610** | **503** | **413** | **380** | **1440** | **395** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 2.9 U | 3.1 U | 2.9 U | 3.1 U | 3 U | 2.8 U | 3.3 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **5040** | **4820** | **39300** | **22200** | **163000** | **31000** | **10200** | **28700** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 9 | Area 9 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-304 | GPEC-SB/PZ-305 | GPEC-SB/PZ-305 | GPEC-SB307 | GPEC-SB307 | GPEC-SB307 | GPEC-SB308 | GPEC-SB308 | GPEC-SB308A |
| | | | Sample Name | GPEC-SB/PZ304 (29-30) | GPEC-SB/PZ305 (2.5-3) | GPEC-SB/PZ305 (18.5-19.5) | GPEC-SB307 (3-3.5) | GPEC-SB307 (11-12) | GPEC-SB307 (23.5-24.5) | GPEC-SB308 (3.5-4) | GPEC-SB308 (9-10) | GPEC-SB308A (3.5-4) |
| | | | Start Depth | 29 | 2.5 | 18.5 | 3 | 11 | 23.5 | 3.5 | 9 | 3.5 |
| | | | End Depth | 30 | 3 | 19.5 | 3.5 | 12 | 24.5 | 4 | 10 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2015 | 3/24/2015 | 3/31/2015 | 5/4/2015 | 5/7/2015 | 5/7/2015 | 3/20/2015 | 4/2/2015 | 5/6/2015 |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **1.37 J** | 0.00584 U | **16.1 J** | 0.00599 U | **0.637 D** | 0.00635 U | **0.193** | **1.66 D** | **0.00247 DJ** |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.952 J** | 0.00584 U | **1.26 J** | 0.00599 U | **0.215 DJ** | 0.00635 U | **0.212** | 1.3 U | 0.00615 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **37.8 J** | 0.00584 U | **464 J** | 0.00599 U | **4.01 D** | 0.00635 U | **0.069** | **8.39 D** | 0.00615 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **40.8 J** | 0.012 U | **103 J** | 0.012 U | **0.575 D** | 0.013 U | **0.217** | **2.4 DJ** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **80.922** | ND | **584.36** | ND | **5.437** | ND | **0.691** | **12.45** | **0.00247** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 2.34 UJ | 0.029 U | 5.36 UJ | 0.03 U | 0.473 U | 0.032 U | 0.134 U | 2.59 U | 0.031 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 23.4 R | 0.117 U | 53.6 R | 0.12 U | 4.73 U | 0.127 U | 1.34 U | 25.9 U | 0.123 U |
| Acrylonitrile | 107-13-1 | NE | NE | 23.4 UJ | 0.117 U | 53.6 UJ | 0.12 U | 4.73 U | 0.127 U | 1.34 U | 25.9 U | 0.123 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Bromoform | 75-25-2 | NE | NE | 2.34 UJ | 0.00584 U | 5.36 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.134 U | 2.59 U | 0.00615 U |
| Bromomethane | 74-83-9 | NE | NE | 1.17 UJ | 0.012 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 2.34 R | 0.023 U | 5.36 R | 0.024 U | 0.473 U | 0.025 U | 0.134 U | 2.59 U | 0.025 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.012 U | 0.473 U | 0.013 U | 0.067 U | 1.3 U | 0.012 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 1.17 UJ | 0.012 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Chloromethane | 74-87-3 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 2-Hexanone | 591-78-6 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 2.34 UJ | **0.02 CD** | 5.36 UJ | 0.012 U | 0.473 U | 0.013 U | 0.134 U | 2.59 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | **0.034 J** | 1.3 U | 0.00615 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | **0.017 D** | 0.067 U | 1.3 U | 0.00615 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Vinyl acetate | 108-05-4 | NE | NE | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 1.17 UJ | 0.00584 U | 2.68 UJ | 0.00599 U | 0.236 U | 0.00635 U | 0.067 U | 1.3 U | 0.00615 U |
| Total VOCs | TVOC | NE | NE | **80.922** | **0.02** | **584.36** | ND | **5.437** | **0.017** | **0.725** | **12.45** | **0.00247** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **4.71** | **0.205** | **43.5** | **0.393** | **22.4 D** | **0.129** | **0.505** | **48.7 D** | **0.056** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.971** | **0.14** | **6.1** | **0.074** | **2.75 D** | **0.105** | **1.64** | **5.92 D** | **1.04** |
| Anthracene | 120-12-7 | 1000 | 1000 | **4.15** | **0.585** | **23.7** | **0.71** | **10.2 D** | **0.369** | **1.69** | **34.4 D** | **0.952** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.964** | **1.75** | **9.53** | **1.36** | **2.01 D** | **0.856** | **1.21** | **9.34 D** | **1.45** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **4.47** | **3.32** | **40.2** | **4.26** | **16.8 D** | **1.92** | **2.86** | **50.9 D** | **1.36** |
| Fluorene | 86-73-7 | 1000 | 386 | **4.99** | **0.17** | **31.5** | **0.428** | **26.4 D** | **0.15** | **0.972** | **57.6 D** | **0.079** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **14.8** | **0.104** | **95** | **0.064** | **43.3 D** | **0.079** | **0.306** | **118 D** | **0.172** |
| Naphthalene | 91-20-3 | 1000 | 12 | **16.2** | **0.138** | **96.7** | **0.075** | **58.5 D** | **0.214** | **0.56** | **97.2 D** | **0.296** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **12.2** | **3.3** | **101** | **3.58** | **69.5 D** | **0.871** | **2.77** | **134 D** | **1.24** |
| Pyrene | 129-00-0 | 1000 | 1000 | **6.64** | **4.53** | **65.8** | **4.08** | **22 D** | **1.72** | **3.84** | **80.6 D** | **1.95** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.77** | **2.29** | **25.4** | **1.86** | **7.23 D** | **1.23** | **1.97** | **27.5 D** | **1.29** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **2.67** | **2.92** | **16.5** | **2.31** | **6.18 D** | **1.37** | **2.57** | **23.2 D** | **1.55** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.26** | **2.26** | **11** | **1.77** | **3.52 D** | **0.888** | **2.07** | **12.2 D** | **1.69** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.97** | **1.92** | **15.8** | **1.88** | **3.15 D** | **1.14** | **1.76** | **14.1 D** | **1.27** |
| Chrysene | 218-01-9 | 110 | 1 | **3.28** | **2.59** | **27.7** | **2.07** | **8.22 D** | **1.76** | **2.25** | **29.5 D** | **1.48** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.435** | **0.527** | **4.44** | **0.427** | **0.495 D** | **0.217** | **0.503** | **4.46 D** | **0.512** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.857** | **1.49** | **8.01** | **1.19** | **1.64 D** | **0.603** | **1.02** | **7.21 D** | **1.17** |
| Total PAHs | TPAH | NE | NE | **83.337** | **28.239** | **621.88** | **26.531** | **304.295** | **13.621** | **28.496** | **754.83** | **17.557** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 9 | Area 9 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-304 | GPEC-SB/PZ-305 | GPEC-SB/PZ-305 | GPEC-SB307 | GPEC-SB307 | GPEC-SB307 | GPEC-SB308 | GPEC-SB308 | GPEC-SB308 | GPEC-SB308A |
| | | | Sample Name | GPEC-SB/PZ304 (29-30) | GPEC-SB/PZ305 (2.5-3) | GPEC-SB/PZ305 (18.5-19.5) | GPEC-SB307 (3-3.5) | GPEC-SB307 (11-12) | GPEC-SB307 (23.5-24.5) | GPEC-SB308 (3.5-4) | GPEC-SB308 (9-10) | GPEC-SB308A (3.5-4) |
| | | | Start Depth | 29 | 2.5 | 18.5 | 3 | 11 | 23.5 | 3.5 | 9 | 3.5 |
| | | | End Depth | 30 | 3 | 19.5 | 3.5 | 12 | 24.5 | 4 | 10 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2015 | 3/24/2015 | 3/31/2015 | 5/4/2015 | 5/7/2015 | 5/7/2015 | 3/20/2015 | 4/2/2015 | 5/6/2015 |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.155 UJ | 0.077 U | 0.888 UJ | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.155 U | **0.076 J** | 0.888 U | **0.221** | 0.388 U | 0.042 U | **0.14** | 0.837 U | **1.63** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Carbazole | 86-74-8 | NE | NE | **0.238** | **0.085** | **1.11** | **0.239** | **0.736 D** | **0.067** | **0.088** | **3.34 D** | **0.026 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.766** | **0.066 J** | **9.09** | **0.233** | **3.62 D** | **0.06** | **0.144** | **15.5 D** | **0.04 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.155 UJ | 0.077 U | 0.888 UJ | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | **0.062** | 0.044 U | 0.837 U | 0.041 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.155 U | 0.077 U | 0.888 U | 0.038 U | 0.388 U | 0.042 U | 0.044 U | 0.837 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | **84.341** | **28.466** | **632.08** | **27.224** | **308.651** | **13.81** | **28.868** | **773.67** | **19.253** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.045 U | 0.023 U | 0.103 U | 0.044 U | 0.043 U | 0.047 U | 0.051 U | 0.098 U | 0.048 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 9 | Area 9 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-304 | GPEC-SB/PZ-305 | GPEC-SB/PZ-305 | GPEC-SB307 | GPEC-SB307 | GPEC-SB307 | GPEC-SB308 | GPEC-SB308 | GPEC-SB308 | GPEC-SB308A |
| | | | Sample Name | GPEC-SB/PZ304 (29-30) | GPEC-SB/PZ305 (2.5-3) | GPEC-SB/PZ305 (18.5-19.5) | GPEC-SB307 (3-3.5) | GPEC-SB307 (11-12) | GPEC-SB307 (23.5-24.5) | GPEC-SB308 (3.5-4) | GPEC-SB308 (9-10) | GPEC-SB308A (3.5-4) |
| | | | Start Depth | 29 | 2.5 | 18.5 | 3 | 11 | 23.5 | 3.5 | 9 | 3.5 |
| | | | End Depth | 30 | 3 | 19.5 | 3.5 | 12 | 24.5 | 4 | 10 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2015 | 3/24/2015 | 3/31/2015 | 5/4/2015 | 5/7/2015 | 5/7/2015 | 3/20/2015 | 4/2/2015 | 5/6/2015 |
| | | | Parent Sample Code | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.058 U | NA | 0.056 U | NA | NA | **0.081** | NA | **0.078** |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | **0.011** | NA | **0.0046 J** |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | **0.00439 J** | NA | 0.00444 U | NA | NA | **0.00578** | NA | **0.0041 J** |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | **0.00784** | NA | **0.00598** | NA | NA | **0.02** | NA | 0.00479 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00465 U | NA | 0.00444 U | NA | NA | 0.00511 U | NA | 0.00479 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.058 U | NA | 0.056 U | NA | NA | 0.064 U | NA | 0.06 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.019 U | NA | 0.00995 U | NA | NA | 0.021 U | NA | 0.01 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.019 U | NA | 0.00995 U | NA | NA | 0.021 U | NA | 0.01 U |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **20500** | **9210** | **5180** | **6570** | **6820** | **7510** | **6590** | **6060** | **8220** |
| Antimony | 7440-36-0 | NE | NE | **2.34** | **36.9** | **14.6** | **3.92** | **0.909** | **0.824** | **49.9** | **189** | **66.7** |
| Arsenic | 7440-38-2 | 16 | 16 | **10.2** | **12** | **31.9** | **9.89** | **4.22** | **6.68** | **8.07** | **15.7** | **27.2** |
| Barium | 7440-39-3 | 10000 | 820 | **139** | **198** | **63** | **121** | **58.5** | **76.4** | **394** | **1100** | **1410** |
| Beryllium | 7440-41-7 | 2700 | 47 | **4.22** | **2.28** | 0.689 U | **0.361 J** | **0.378 J** | **0.409 J** | **1.7** | **0.431 J** | **0.623 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.6 J** | **1.51** | **0.29 J** | **0.332 J** | **0.175 J** | **0.243 J** | **1.9** | **2.84** | **7.34** |
| Calcium | 7440-70-2 | NE | NE | **7040** | **6760** | **19000** | **4870** | **7960** | **3440** | **11400** | **8460** | **10000** |
| Chromium | 7440-47-3 | NE | NE | **69.5** | **48.1** | **19.4** | **18.5** | **15** | **19.2** | **40.6** | **103** | **154** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 2.34 U | 1.17 U | 1.34 U | 1.2 U | 1.18 U | 1.27 U | **0.354 J** | 1.3 U | 1.23 U |
| Cobalt | 7440-48-4 | NE | NE | **27.9** | **17.1** | **12.1** | **5.24** | **5.22** | **5.42** | **11.2** | **6.28** | **10.8** |
| Copper | 7440-50-8 | 10000 | 1720 | **382** | **331** | **153** | **389** | **46.2** | **51.4** | **208** | **632** | **1150** |
| Iron | 7439-89-6 | NE | NE | **52700** | **38900** | **93900** | **17600** | **14000** | **14700** | **22100** | **30100** | **28000** |
| Lead | 7439-92-1 | 3900 | 450 | **730** | **1430** | **26800** | **199** | **73.1** | **160** | **1800** | **381** | **2200** |
| Magnesium | 7439-95-4 | NE | NE | **8280** | **3270** | **2840** | **1880** | **4020** | **2160** | **5040** | **1710** | **4100** |
| Manganese | 7439-96-5 | 10000 | 2000 | **544** | **367** | **607** | **277** | **631** | **216** | **340** | **1580** | **3240** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.161** | **6.95 D** | **1.02** | **0.85** | **0.331** | **1.69** | **0.498** | **1.35** | **3.6** |
| Nickel | 7440-02-0 | 10000 | 130 | **166** | **126** | **30.2** | **20** | **12.5** | **15.4** | **68.7** | **45.7** | **54.3** |
| Potassium | 7440-09-7 | NE | NE | **3820** | **951** | **655** | **864** | **745** | **972** | **871** | **826** | **920** |
| Selenium | 7782-49-2 | 6800 | 4 | **4.16** | **2.53** | **1.84** | **2.78** | **0.683** | **1.39** | **1.63** | **1.42** | **2.29** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.414 J** | **0.578 J** | **0.958** | **0.941** | 0.628 U | 0.667 U | **0.427 J** | **1.38** | **2.16** |
| Sodium | 7440-23-5 | NE | NE | **5330** | **198** | **856** | **172** | **142** | **828** | **188** | **202** | **182** |
| Thallium | 7440-28-0 | NE | NE | 1.26 U | **0.278 J** | 0.689 U | **0.273 J** | **0.16 J** | **0.193 J** | 0.716 U | **0.571 J** | **0.248 J** |
| Vanadium | 7440-62-2 | NE | NE | **61.5** | **41.7** | **35.6** | **20.4** | **20.4** | **25.1** | **24.6** | **26.6** | **34** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1210** | **915** | **183** | **178** | **99.9** | **86.7** | **931** | **1220** | **3670** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 5.8 U | 2.9 U | 3.4 U | 3 U | 3 U | 3.2 U | 3.3 U | 3.2 U | 3.1 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **79100** | **10800** | **29900** | **16000** | **11100** | **20100** | **36000** | **32900** | **23600** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB313** | **GPEC-SB313** | **GPEC-SB318** | **GPEC-SB318** | **GPEC-SB326** | **GPEC-SB326** | **GPEC-SB326** | **GPEC-SB/PZ-330** | **GPEC-SB/PZ-330** |
| **Sample Name** | | | | **GPEC-SB313 (3-3.5)** | **GPEC-SB313 (18-19)** | **GPEC-SB318 (6.5-7)** | **GPEC-SB318 (20.5-21)** | **GPEC-SB326 (3-3.5)** | **GPEC-SB503 (3-3.5)** | **GPEC-SB326 (26-27)** | **GPEC-SB/PZ330 (5-5.5)** | **GPEC-SB/PZ330 (9-10)** |
| **Start Depth** | | | | **3** | **18** | **6.5** | **20.5** | **3** | **3** | **26** | **5** | **9** |
| **End Depth** | | | | **3.5** | **19** | **7** | **21** | **3.5** | **3.5** | **27** | **5.5** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/23/2015** | **4/1/2015** | **3/19/2015** | **3/30/2015** | **5/6/2015** | **5/6/2015** | **5/7/2015** | **3/20/2015** | **4/1/2015** |
| Parent Sample Code | | | | | | | | | GPEC-SB-326 (3-3.5) | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | **1.55** | 0.006 U | 0.00583 UJ |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0058 U | **0.12 J** | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0058 U | **0.084 J** | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | **0.318** | 0.006 U | 0.00583 UJ |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | **0.206 J** | 0.012 U | 0.012 UJ | 0.012 U | 0.012 U | **0.231 J** | 0.012 U | 0.012 UJ |
| Total BTEX | TBTEX | NE | NE | ND | **0.41** | ND | ND | ND | ND | **2.099** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 U | **1.13 J** | 0.03 U | 0.031 UJ | 0.029 U | 0.03 U | 0.268 U | 0.03 U | 0.029 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.116 U | 3.07 R | 0.118 U | 0.123 R | 0.115 U | 0.119 U | 2.68 U | 0.12 U | 0.117 R |
| Acrylonitrile | 107-13-1 | NE | NE | 0.116 U | 3.07 UJ | 0.118 U | 0.123 UJ | 0.115 U | 0.119 U | 2.68 U | 0.12 U | 0.117 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Bromoform | 75-25-2 | NE | NE | 0.0058 U | 0.307 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 0.153 UJ | 0.012 U | 0.012 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.012 U | 0.012 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.023 U | 0.307 R | 0.024 U | 0.025 R | 0.023 U | 0.024 U | 0.268 U | 0.024 U | 0.023 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0058 U | **2.09 J** | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | **0.0068 J** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.012 U | 0.012 U | 0.268 U | 0.006 U | 0.00583 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.012 U | 0.153 UJ | 0.012 U | 0.012 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.012 U | 0.012 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Chloromethane | 74-87-3 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.021 CD** | 0.307 UJ | 0.012 U | 0.012 UJ | 0.012 U | 0.012 U | 0.268 U | **0.018 CD** | 0.012 UJ |
| Styrene | 100-42-5 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | **0.00848 D** | 0.00583 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0058 U | 0.153 UJ | 0.0059 U | 0.00613 UJ | 0.00573 U | 0.00595 U | 0.134 U | 0.006 U | 0.00583 UJ |
| Total VOCs | TVOC | NE | NE | **0.021** | **3.63** | ND | ND | ND | ND | **2.099** | **0.02648** | **0.0068** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.43** | **0.98** | **0.566** | **0.034 J** | **0.503** | **2.85** | **3.25 D** | 0.04 U | 0.037 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **1.92** | 0.05 U | **0.369** | 0.04 U | **0.036 J** | **0.057** | **0.523 D** | **0.064** | 0.037 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.93** | **2.3** | **1.37** | **0.06** | **1.13** | **5.1** | **3.97 D** | **0.064** | **0.063** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **3.73** | **1.23** | **1.05** | **0.109** | **3.48** | **6.11 D** | **0.689 D** | **0.098** | 0.037 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **8.57** | **4.32** | **4.84** | **0.249** | **6.6 D** | **19.4 D** | **3.56 D** | **0.032 J** | **0.04** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.549** | **1.02** | **0.583** | **0.04 J** | **0.323** | **1.93** | **1.7 D** | 0.04 U | **0.033 J** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.361** | **0.542** | **0.419** | **0.037 J** | **0.082** | **0.411** | **1.12 D** | 0.04 U | **0.042** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.824** | **0.978** | **0.406** | **0.064** | **0.186** | **0.29** | **5.14 D** | **0.061** | **0.116** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **5.16** | **5.85** | **3.79** | **0.31** | **3.04** | **22.1 D** | **6.41 D** | **0.038 J** | **0.131** |
| Pyrene | 129-00-0 | 1000 | 1000 | **8.27** | **4.89** | **3.98** | **0.333** | **7.17 D** | **27.6 D** | **4.15 D** | **0.034 J** | **0.064** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **4.99** | **2.45** | **2.04** | **0.127** | **4.55** | **11.9 D** | **2.13 D** | **0.03 J** | **0.033 J** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **7.97** | **2.41** | **2.36** | **0.133** | **5.28 D** | **14.1 D** | **1.95 D** | **0.03 J** | 0.037 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **6.33** | **1.66** | **1.84** | **0.108** | **5.54** | **9.66 D** | **0.972 D** | **0.029 J** | 0.037 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **5.13** | **1.93** | **2.07** | **0.168** | **3.06** | **8.62 D** | **1.26 D** | 0.04 U | 0.037 U |
| Chrysene | 218-01-9 | 110 | 1 | **5.25** | **2.57** | **2.02** | **0.159** | **4.7** | **14.5 D** | **2.21 D** | 0.04 U | **0.03 J** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.62** | **0.446** | **0.375** | **0.04** | **1.43** | **2.52** | **0.239 D** | 0.04 U | 0.037 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **4.39** | **1.08** | **0.978** | **0.084** | **3.26** | **5.66** | **0.538 D** | **0.047** | 0.037 U |
| Total PAHs | TPAH | NE | NE | **67.424** | **34.656** | **29.056** | **2.055** | **50.37** | **152.808** | **39.811** | **0.527** | **0.552** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB313 | GPEC-SB313 | GPEC-SB318 | GPEC-SB318 | GPEC-SB326 | GPEC-SB326 | GPEC-SB326 | GPEC-SB/PZ-330 | GPEC-SB/PZ-330 |
| | | | Sample Name | GPEC-SB313 (3-3.5) | GPEC-SB313 (18-19) | GPEC-SB318 (6.5-7) | GPEC-SB318 (20.5-21) | GPEC-SB326 (3-3.5) | GPEC-SB503 (3-3.5) | GPEC-SB326 (26-27) | GPEC-SB/PZ330 (5-5.5) | GPEC-SB/PZ330 (9-10) |
| | | | Start Depth | 3 | 18 | 6.5 | 20.5 | 3 | 3 | 26 | 5 | 9 |
| | | | End Depth | 3.5 | 19 | 7 | 21 | 3.5 | 3.5 | 27 | 5.5 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/23/2015 | 4/1/2015 | 3/19/2015 | 3/30/2015 | 5/6/2015 | 5/6/2015 | 5/7/2015 | 3/20/2015 | 4/1/2015 |
| | | | Parent Sample Code | | | | | | GPEC-SB-326 (3-3.5) | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.073 U | 0.05 UJ | 0.039 U | 0.04 UJ | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 UJ |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.277** | 0.05 U | **0.7** | 0.04 U | **1.66** | **3.01** | 0.087 U | 0.04 U | **0.094** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | **0.404** | **0.57** | **0.384** | **0.033 J** | **0.116** | **0.193** | **0.084 DJ** | 0.04 U | 0.037 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.223** | **0.544** | **0.318** | **0.027 J** | **0.206** | **0.349** | **0.224 D** | 0.04 U | 0.037 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.073 U | 0.05 UJ | 0.039 U | 0.04 UJ | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.073 U | **0.722** | 0.039 U | 0.04 U | 0.038 U | 0.039 U | **0.252 D** | 0.04 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.073 U | 0.05 U | 0.039 U | 0.04 U | 0.038 U | 0.039 U | 0.087 U | 0.04 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | **68.328** | **36.492** | **30.458** | **2.115** | **52.352** | **156.36** | **40.371** | **0.527** | **0.646** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.113 U | 0.03 U | 0.023 U | 0.024 U | 0.046 U | 0.045 U | 0.048 U | 0.024 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB313** | **GPEC-SB313** | **GPEC-SB318** | **GPEC-SB318** | **GPEC-SB326** | **GPEC-SB326** | **GPEC-SB326** | **GPEC-SB/PZ-330** | **GPEC-SB/PZ-330** |
| **Sample Name** | | | | **GPEC-SB313 (3-3.5)** | **GPEC-SB313 (18-19)** | **GPEC-SB318 (6.5-7)** | **GPEC-SB318 (20.5-21)** | **GPEC-SB326 (3-3.5)** | **GPEC-SB503 (3-3.5)** | **GPEC-SB326 (26-27)** | **GPEC-SB/PZ330 (5-5.5)** | **GPEC-SB/PZ330 (9-10)** |
| **Start Depth** | | | | **3** | **18** | **6.5** | **20.5** | **3** | **3** | **26** | **5** | **9** |
| **End Depth** | | | | **3.5** | **19** | **7** | **21** | **3.5** | **3.5** | **27** | **5.5** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/23/2015** | **4/1/2015** | **3/19/2015** | **3/30/2015** | **5/6/2015** | **5/6/2015** | **5/7/2015** | **3/20/2015** | **4/1/2015** |
| Parent Sample Code | | | | | | | | | GPEC-SB-326 (3-3.5) | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | **0.073** | NA | 0.059 U | NA | 0.057 U | 0.057 U | NA | 0.059 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | **0.0058** | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.00582** | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | **0.033** | NA | **0.00688** | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00451 U | NA | 0.00468 U | NA | 0.00457 U | 0.00453 U | NA | 0.00473 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.056 U | NA | 0.059 U | NA | 0.057 U | 0.057 U | NA | 0.059 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | 0.019 U | NA | 0.0093 U | 0.00975 U | NA | 0.019 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | 0.019 U | NA | 0.0093 U | 0.00975 U | NA | 0.019 U | NA |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7620** | **1990** | **7710** | **11300** | **7930** | **8990** | **9160** | **11700** | **8050** |
| Antimony | 7440-36-0 | NE | NE | **10.2** | **32** | **1.5** | **0.353 J** | **1.88** | **3.04** | 0.722 U | 0.636 U | 0.612 U |
| Arsenic | 7440-38-2 | 16 | 16 | **21.9** | **9.01** | **9.48** | **4.14** | **5.27** | **5.35** | **3.31** | **3.47** | **2.33** |
| Barium | 7440-39-3 | 10000 | 820 | **243** | **127** | **114** | **108** | **142** | **141** | **63.4** | **59.8** | **61.2** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.481 J** | 0.79 U | **1.4** | **0.697** | **0.428 J** | **0.47 J** | **0.524 J** | **0.61 J** | **0.512 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **2.3** | **0.326 J** | **0.349 J** | 0.643 U | **0.224 J** | **0.209 J** | 0.722 U | 0.636 U | 0.612 U |
| Calcium | 7440-70-2 | NE | NE | **7790** | **232000** | **7550** | **14100** | **4030** | **3910** | **5350** | **1080** | **2350** |
| Chromium | 7440-47-3 | NE | NE | **24.9** | **3.98** | **30.1** | **27.8** | **21.6** | **23.6** | **20.9** | **16.9** | **22** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.16 U | 1.53 U | 1.2 U | 1.23 U | 1.15 U | 1.19 U | 1.34 U | 1.2 U | 1.17 U |
| Cobalt | 7440-48-4 | NE | NE | **7.69** | **0.94** | **7.82** | **7.09** | **6.58** | **7.28** | **6.87** | **6.69** | **7.38** |
| Copper | 7440-50-8 | 10000 | 1720 | **306** | **177** | **135** | **34.9** | **202** | **71.9** | **25.8** | **14.1** | **17.3** |
| Iron | 7439-89-6 | NE | NE | **26800** | **3590** | **20800** | **22800** | **19300** | **23300** | **21900** | **17000** | **25400** |
| Lead | 7439-92-1 | 3900 | 450 | **538** | **315** | **252** | **123** | **289** | **279** | **50.1** | **35.5** | **8.63** |
| Magnesium | 7439-95-4 | NE | NE | **3130** | **2520** | **4410** | **2940** | **2650** | **2600** | **2680** | **2320** | **2700** |
| Manganese | 7439-96-5 | 10000 | 2000 | **412** | **239** | **304** | **501** | **310** | **376** | **508** | **446** | **425** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **24 D** | **4.52 J** | **0.358** | **0.291** | **0.626** | **0.369** | **0.407** | **0.106** | **0.028** |
| Nickel | 7440-02-0 | 10000 | 130 | **22.9** | **2.87** | **34.1** | **21.6** | **22.6** | **22** | **14.8** | **12.3** | **14.1** |
| Potassium | 7440-09-7 | NE | NE | **949** | **1070** | **993** | **1350** | **1280** | **1310** | **1240** | **888** | **1230** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.1** | **1.32** | **1.45** | **1.46** | **1.62** | **1.61** | **1.49** | **1.09** | **0.844** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.52 J** | **0.277 J** | **0.173 J** | 0.643 U | **0.246 J** | **0.345 J** | 0.722 U | 0.636 U | 0.612 U |
| Sodium | 7440-23-5 | NE | NE | **167** | **1940** | **187** | **454** | **110** | **160** | **561** | **119** | **143** |
| Thallium | 7440-28-0 | NE | NE | **0.289 J** | **0.675 J** | 0.622 U | **0.254 J** | **1.05** | **0.241 J** | 0.722 U | 0.636 U | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | **44.8** | **5.13** | **35.4** | **33.1** | **27** | **30.7** | **31.4** | **25.4** | **34.8** |
| Zinc | 7440-66-6 | 10000 | 2480 | **552** | **113** | **228** | **139** | **165** | **166** | **38.7** | **43.7** | **39.2** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3.8 U | 2.9 U | 3.1 U | 2.9 U | 3 U | 3.3 U | 3 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **56200** | **53600** | **10100** | **7280** | **17800** | **17900** | **11600** | **4610** | **2020** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB/PZ-330 | GPEC-SB331 | GPEC-SB331 | GPEC-SB331 | GPEC-SB332 | GPEC-SB/PZ-332 | GPEC-SB/PZ-332 | GPEC-SB333 |
| Sample Name | | | | GPEC-SB/PZ330 (18.5-19.5) | GPEC-SB331 (3.5-4) | GPEC-SB331 (14-15) | GPEC-SB331 (74-75) | GPEC-SB332 (3.5-4) | GPEC-SB/PZ332 (22-23) | GPEC-SB/PZ332 (82-83) | GPEC-SB333 (3.5-4) |
| Start Depth | | | | 18.5 | 3.5 | 14 | 74 | 3.5 | 22 | 82 | 3.5 |
| End Depth | | | | 19.5 | 4 | 15 | 75 | 4 | 23 | 83 | 4 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 4/1/2015 | 3/20/2015 | 7/17/2015 | 7/17/2015 | 3/20/2015 | 7/7/2015 | 7/8/2015 | 3/17/2015 |
| Parent Sample Code | | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00612 UJ | **1.01 D** | **3.34 D** | 0.00602 U | 0.00637 U | **28.6 D** | 0.00605 U | 0.00611 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00612 UJ | **1.12 D** | **2.12 DJ** | 0.00602 U | 0.00637 U | **31.3 D** | 0.00605 U | 0.00611 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00612 UJ | **4.98 D** | **113 D** | 0.00602 U | 0.00637 U | **151 D** | **0.00409 DJ** | 0.00611 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 UJ | **4.89 D** | **80.8 D** | 0.012 U | 0.013 U | **111 D** | **0.019 D** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | **12** | **199.26** | ND | ND | **321.9** | **0.02309** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.031 UJ | 1.2 U | 5.08 U | 0.03 U | 0.032 U | 13.1 U | 0.03 U | 0.031 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.122 R | 12 U | 50.8 U | 0.12 U | 0.127 U | 131 U | 0.121 U | 0.122 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.122 UJ | 12 U | 50.8 U | 0.12 U | 0.127 U | 131 U | 0.121 U | 0.122 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Bromoform | 75-25-2 | NE | NE | 0.00612 UJ | 1.2 U | 2.54 U | 0.012 U | 0.00637 U | 6.55 U | 0.012 U | 0.00611 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.013 U | 6.55 U | 0.00605 U | 0.012 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.025 R | 1.2 U | 5.08 U | 0.024 U | 0.026 U | 13.1 U | 0.024 U | 0.024 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.012 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.013 U | 6.55 U | 0.00605 U | 0.012 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00612 UJ | 0.599 U | 2.54 U | **0.00673 D** | 0.00637 U | 6.55 U | **0.00289 DJ** | 0.00611 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 13.1 U | 0.00605 U | 0.00611 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00612 UJ | 0.599 U | 2.54 U | **0.00288 DJ** | 0.00637 U | 6.55 U | **0.00257 DJ** | 0.00611 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 UJ | 1.2 U | 5.08 U | 0.012 U | 0.013 U | 13.1 U | 0.012 U | **0.015 CD** |
| Styrene | 100-42-5 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00612 UJ | 0.599 U | 2.54 U | **0.057 D** | 0.00637 U | 6.55 U | **0.019 D** | 0.00611 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 13.1 U | 0.00605 U | 0.00611 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00612 UJ | 0.599 U | 2.54 U | **0.024 D** | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 13.1 U | 0.00605 U | 0.00611 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00612 UJ | 0.599 U | 2.54 U | 0.00602 U | 0.00637 U | 6.55 U | 0.00605 U | 0.00611 U |
| Total VOCs | TVOC | NE | NE | ND | **12** | **199.26** | **0.09061** | ND | **321.9** | **0.04755** | **0.015** |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.04 U | **2.91 D** | **13.2 D** | 0.039 U | **0.664** | **367 D** | **0.035 J** | **0.397** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.04 U | **2.29 D** | **1.94 D** | 0.039 U | **1.19** | **73.9 D** | **0.096** | **0.863** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.04 U | **5.69 D** | **8.38 D** | 0.039 U | **1.28** | **229 D** | **0.131** | **1.75** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.04 U | **4.27 D** | **2.39 D** | 0.039 U | **0.937** | **29.5 D** | 0.04 U | **3.59** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.04 U | **17.4 D** | **18.3 D** | 0.039 U | **3.96** | **271 D** | **0.034 J** | **12.6** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.04 U | **3.74 D** | **14.4 D** | 0.039 U | **1.1** | **481 D** | **0.046** | **0.83** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.048** | **9.14 D** | **60.9 D** | 0.039 U | **0.32** | **1150 D** | **0.046** | **0.484** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.207** | **14.5 D** | **131 D** | **0.042** | **0.805** | **1970 D** | **0.068** | **0.466** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.038 J** | **17.2 D** | **42.3 D** | 0.039 U | **4.13** | **1430 D** | **0.119** | **9.18** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.03 J** | **16.8 D** | **19.4 D** | 0.039 U | **5.33** | **613 D** | **0.052** | **10.6** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.04 U | **8.69 D** | **7.22 D** | 0.039 U | **2.3** | **164 D** | 0.04 U | **5.8** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.04 U | **10.6 D** | **4.71 D** | 0.039 U | **2.56** | **96.4 D** | 0.04 U | **5.45** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.04 U | **11 D** | **3.59 D** | 0.039 U | **2.16** | **69.4 D** | 0.04 U | **5.43** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.04 U | **7.31 D** | **3.39 D** | 0.039 U | **1.74** | **47.7 D** | 0.04 U | **4.74** |
| Chrysene | 218-01-9 | 110 | 1 | 0.04 U | **9.07 D** | **7.93 D** | 0.039 U | **2.65** | **176 D** | 0.04 U | **6.38** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.04 U | **1.87 D** | 1.26 U | 0.039 U | **0.406** | **15 D** | 0.04 U | **1.37** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.04 U | **4.26 D** | **2.08 D** | 0.039 U | **0.923** | **28.6 D** | 0.04 U | **3.1** |
| Total PAHs | TPAH | NE | NE | **0.323** | **146.74** | **341.13** | **0.042** | **32.455** | **7211.5** | **0.627** | **73.03** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB/PZ-330 | GPEC-SB331 | GPEC-SB331 | GPEC-SB331 | GPEC-SB332 | GPEC-SB/PZ-332 | GPEC-SB/PZ-332 | GPEC-SB333 |
| Sample Name | | | | GPEC-SB/PZ330 (18.5-19.5) | GPEC-SB331 (3.5-4) | GPEC-SB331 (14-15) | GPEC-SB331 (74-75) | GPEC-SB332 (3.5-4) | GPEC-SB/PZ332 (22-23) | GPEC-SB/PZ332 (82-83) | GPEC-SB333 (3.5-4) |
| Start Depth | | | | 18.5 | 3.5 | 14 | 74 | 3.5 | 22 | 82 | 3.5 |
| End Depth | | | | 19.5 | 4 | 15 | 75 | 4 | 23 | 83 | 4 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 4/1/2015 | 3/20/2015 | 7/17/2015 | 7/17/2015 | 3/20/2015 | 7/7/2015 | 7/8/2015 | 3/17/2015 |
| Parent Sample Code | | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.04 R | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.04 UJ | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | **0.168** | 0.638 U | **7.86 D** | 0.081 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | **0.857 D** | 1.26 U | 0.039 U | **0.059** | **21 D** | 0.04 U | **0.356** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | **1.52 D** | **4.59 D** | 0.039 U | **0.121** | **95.6 D** | 0.04 U | **0.267** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.04 UJ | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Pyridine | 110-86-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.197 U | 1.26 U | 0.039 U | 0.042 U | 0.638 U | 0.04 U | 0.081 U |
| Total SVOCs | TSVOC | NE | NE | **0.323** | **149.117** | **345.72** | **0.042** | **32.803** | **7328.1** | **8.487** | **73.653** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.047 U | 0.024 U | 0.024 U | 0.025 U | 0.259 U | 0.023 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB/PZ-330 | GPEC-SB331 | GPEC-SB331 | GPEC-SB331 | GPEC-SB332 | GPEC-SB/PZ-332 | GPEC-SB/PZ-332 | GPEC-SB333 |
| Sample Name | | | | GPEC-SB/PZ330 (18.5-19.5) | GPEC-SB331 (3.5-4) | GPEC-SB331 (14-15) | GPEC-SB331 (74-75) | GPEC-SB332 (3.5-4) | GPEC-SB/PZ332 (22-23) | GPEC-SB/PZ332 (82-83) | GPEC-SB333 (3.5-4) |
| Start Depth | | | | 18.5 | 3.5 | 14 | 74 | 3.5 | 22 | 82 | 3.5 |
| End Depth | | | | 19.5 | 4 | 15 | 75 | 4 | 23 | 83 | 4 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 4/1/2015 | 3/20/2015 | 7/17/2015 | 7/17/2015 | 3/20/2015 | 7/7/2015 | 7/8/2015 | 3/17/2015 |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00473 U | NA | NA | 0.00502 U | ND | NA | 0.00463 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.059 U | NA | NA | 0.063 U | NA | NA | 0.058 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | **0.032** |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | **0.03** | NA | NA | **0.00865** | NA | NA | **0.018** |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | **0.02** |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00473 U | NA | NA | 0.00502 U | NA | NA | 0.00463 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.059 U | NA | NA | 0.063 U | NA | NA | 0.058 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.02 U | NA | NA | 0.021 U | NA | NA | 0.02 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.02 U | NA | NA | 0.021 U | NA | NA | 0.02 U |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **10500** | **8100** | **11300** | **3510** | **7370** | **2080** | **4040** | **7460** |
| Antimony | 7440-36-0 | NE | NE | **1.12** | **5.67** | **3.93** | 0.649 U | **11.3** | **2.11** | 0.628 U | **4.73** |
| Arsenic | 7440-38-2 | 16 | 16 | **3.25** | **9.98** | **10.6** | **0.983** | **8.16** | **12.9** | **1.39** | **16.4** |
| Barium | 7440-39-3 | 10000 | 820 | **62.4** | **274** | **197** | **22.7** | **256** | **20** | **27.1** | **507** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.461 J** | **1.16** | **1.17** | 0.649 U | **0.743** | 0.688 U | **0.295 J** | **0.844** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.66 U | **1.36** | **0.841** | 0.649 U | **1.99** | 0.688 U | 0.628 U | **1.36** |
| Calcium | 7440-70-2 | NE | NE | **2010** | **9450** | **5630** | **11500** | **4050** | **6470** | **3950** | **6900** |
| Chromium | 7440-47-3 | NE | NE | **18.7** | **36.9** | **42.8** | **10.3** | **34** | **9.41** | **12** | **26.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.22 U | **1.44** | 1.27 U | 1.2 U | 1.27 U | 1.31 U | 1.21 U | 1.22 U |
| Cobalt | 7440-48-4 | NE | NE | **6.54** | **12.5** | **12** | **3.89** | **8.41** | **7.21** | **3.85** | **9.59** |
| Copper | 7440-50-8 | 10000 | 1720 | **12.9** | **261** | **251** | **10.1** | **268** | **120** | **10** | **264** |
| Iron | 7439-89-6 | NE | NE | **15300** | **24400** | **32700** | **11400** | **18400** | **36000** | **11500** | **26800** |
| Lead | 7439-92-1 | 3900 | 450 | **18.4** | **1420** | **875** | **9.02** | **770** | **93.7** | **2.76** | **738** |
| Magnesium | 7439-95-4 | NE | NE | **2320** | **5320** | **2730** | **5750** | **2710** | **792** | **3320** | **3170** |
| Manganese | 7439-96-5 | 10000 | 2000 | **159** | **304** | **467** | **190** | **259** | **173** | **249** | **322** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.12** | **0.531** | **0.707** | **0.021** | **1.32** | **0.167** | 0.0068 U | **0.67** |
| Nickel | 7440-02-0 | 10000 | 130 | **12.7** | **70.2** | **75.4** | **7.92** | **46** | **24.2** | **8.84** | **47.4** |
| Potassium | 7440-09-7 | NE | NE | **1070** | **823** | **1100** | **696** | **898** | **263** | **936** | **949** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.43** | **1.15** | **2.78** | **1.6** | 0.687 U | **2.16** | **0.734** | **1.94** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.66 U | **0.412 J** | **0.353 J** | 0.649 U | **0.367 J** | 0.688 U | 0.628 U | **0.495 J** |
| Sodium | 7440-23-5 | NE | NE | **290** | **151** | **217** | **254** | **145** | **498** | **284** | **271** |
| Thallium | 7440-28-0 | NE | NE | 0.66 U | 0.62 U | **0.493 J** | **0.291 J** | 0.687 U | **0.198 J** | 0.628 U | **0.235 J** |
| Vanadium | 7440-62-2 | NE | NE | **32** | **27.6** | **36.1** | **19.4** | **25.6** | **15.1** | **26.4** | **27.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **36.1** | **686** | **677** | **21.4** | **1020** | **75.6** | **19.3** | **679** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 3 U | 3.2 U | 3 U | 3.2 U | 3.3 U | 3 U | 3.1 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **13400** | **39700** | **30100** | 1000 U | **19100** | **128000** | 1000 U | **25500** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-333 | GPEC-SB/PZ-333 | GPEC-SB/PZ-333 | GPEC-SB334 | GPEC-SB334 | GPEC-SB334 | GPEC-SB336 | GPEC-SB336 | GPEC-SB336 |
| | | | Sample Name | GPEC-SB/PZ333 | GPEC-SB/PZ333 | GPEC-SB/PZ504 | GPEC-SB334 (3-3.5) | GPEC-SB334 (24-25) | GPEC-SB334 (74-75) | GPEC-SB336 (2.5-3) | GPEC-SB336 (9-10) | GPEC-SB336 (22-23) |
| | | | Start Depth | 21 | 79 | 79 | 3 | 24 | 74 | 2.5 | 9 | 22 |
| | | | End Depth | 22 | 80 | 80 | 3.5 | 25 | 75 | 3 | 10 | 23 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/13/2015 | 7/14/2015 | 7/14/2015 | 3/17/2015 | 7/16/2015 | 7/16/2015 | 3/24/2015 | 4/1/2015 | 4/1/2015 |
| | | | Parent Sample Code | | | GPEC-SB/PZ-333 | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | **20.8 D** | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Toluene | 108-88-3 | 1000 | 0.7 | **9.92 DJ** | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Ethylbenzene | 100-41-4 | 780 | 1 | **35.6 D** | 0.00579 U | 0.00571 U | 0.00583 U | **129 D** | **0.00367 DJ** | 0.00577 U | 0.595 UJ | **0.017 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **43.4 D** | **0.00851 DJ** | 0.011 U | 0.012 U | **81.9 D** | **0.028 D** | 0.012 U | 1.19 UJ | **0.022 J** |
| Total BTEX | TBTEX | NE | NE | **109.72** | **0.00851** | ND | ND | **210.9** | **0.03167** | ND | ND | **0.039** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 30.8 U | 0.029 U | 0.029 U | 0.029 U | 27.5 U | **0.067 D** | 0.029 U | 1.19 UJ | 0.058 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | 308 U | 0.116 U | 0.114 U | 0.117 U | 275 U | 0.112 U | 0.115 U | 11.9 R | 0.231 R |
| Acrylonitrile | 107-13-1 | NE | NE | 308 U | 0.116 U | 0.114 U | 0.117 U | 275 U | 0.112 U | 0.115 U | 11.9 UJ | 0.231 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Bromoform | 75-25-2 | NE | NE | 15.4 U | 0.012 U | 0.011 U | 0.00583 U | 13.8 U | 0.011 U | 0.00577 U | 1.19 UJ | 0.012 UJ |
| Bromomethane | 74-83-9 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.012 U | 13.8 U | 0.00558 U | 0.012 U | 0.595 UJ | 0.023 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | **0.04 J** |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 30.8 U | 0.023 U | 0.023 U | 0.023 U | 27.5 U | 0.022 U | 0.023 U | 1.19 R | 0.046 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | **0.00502 DJ** | 0.00577 U | 0.595 UJ | **0.031 J** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 15.4 U | 0.00579 U | 0.00571 U | 0.012 U | 13.8 U | 0.00558 U | 0.012 U | 0.595 UJ | 0.023 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Chloromethane | 74-87-3 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 30.8 U | **0.017 CD** | **0.028 CD** | 0.012 U | 27.5 U | 0.011 U | **0.023 CD** | 1.19 UJ | 0.023 UJ |
| Styrene | 100-42-5 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 15.4 U | **0.044 D** | **0.034 D** | 0.00583 U | 13.8 U | **0.00753 D** | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 15.4 U | **0.022 CD** | **0.027 CD** | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 15.4 U | **0.00241 DJ** | **0.00202 DJ** | 0.00583 U | 13.8 U | **0.00195 DJ** | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 15.4 U | 0.00579 U | 0.00571 U | 0.00583 U | 13.8 U | 0.00558 U | 0.00577 U | 0.595 UJ | 0.012 UJ |
| Total VOCs | TVOC | NE | NE | **109.72** | **0.09392** | **0.09102** | ND | **210.9** | **0.11317** | **0.023** | ND | **0.11** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **140 D** | 0.039 U | 0.036 U | **0.983 D** | **47 D** | 0.036 U | **1.07** | **0.139** | **0.091** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **244 D** | 0.039 U | 0.036 U | **1.12 D** | **68.7 D** | 0.036 U | **0.605** | 0.039 U | 0.075 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **873 D** | 0.039 U | 0.036 U | **2.52 D** | **197 D** | 0.036 U | **2.28** | **0.054** | **0.081** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **40 D** | 0.039 U | 0.036 U | **4.67 D** | **20 D** | 0.036 U | **6.44** | **0.074** | **0.11** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **1070 D** | 0.039 U | 0.036 U | **18.3 D** | **163 D** | 0.036 U | **11.5** | **0.203** | **0.221** |
| Fluorene | 86-73-7 | 1000 | 386 | **932 D** | 0.039 U | 0.036 U | **1.02 D** | **224 D** | 0.036 U | **0.952** | **0.111** | **0.077** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **4420 D** | **0.107** | **0.073** | **0.377 D** | **583 D** | **0.033 J** | **0.365** | **1.37** | **0.184** |
| Naphthalene | 91-20-3 | 1000 | 12 | **4960 D** | **0.362** | **0.334** | **0.637 D** | **1340 D** | **0.079** | **0.713** | **0.23** | **0.43** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **2800 D** | 0.039 U | 0.036 U | **12.4 D** | **377 D** | **0.045** | **8.72** | **0.31** | **0.299** |
| Pyrene | 129-00-0 | 1000 | 1000 | **1310 D** | 0.039 U | 0.036 U | **15.6 D** | **263 D** | 0.036 U | **11.8** | **0.189** | **0.246** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **502 D** | 0.039 U | 0.036 U | **7.68 D** | **102 D** | 0.036 U | **7.77** | **0.093** | **0.148** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **182 D** | 0.039 U | 0.036 U | **8.1 D** | **51.7 D** | 0.036 U | **10** | **0.096** | **0.135** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **112 D** | 0.039 U | 0.036 U | **7.26 D** | **27.3 D** | 0.036 U | **9.25** | **0.074** | **0.144** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **126 D** | 0.039 U | 0.036 U | **6.84 D** | **31.7 D** | 0.036 U | **7.74** | **0.111** | **0.131** |
| Chrysene | 218-01-9 | 110 | 1 | **456 D** | 0.039 U | 0.036 U | **8.67 D** | **102 D** | 0.036 U | **8.41** | **0.109** | **0.151** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **22.2 D** | 0.039 U | 0.036 U | **1.94 D** | **6.76 D** | 0.036 U | **2.69** | **0.028 J** | **0.082** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **42 D** | 0.039 U | 0.036 U | **4.18 D** | **16.5 D** | 0.036 U | **5.79** | **0.065** | **0.132** |
| Total PAHs | TPAH | NE | NE | **18231.2** | **0.469** | **0.407** | **102.297** | **3620.66** | **0.157** | **96.095** | **3.256** | **2.662** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-333 | GPEC-SB/PZ-333 | GPEC-SB/PZ-333 | GPEC-SB334 | GPEC-SB334 | GPEC-SB334 | GPEC-SB336 | GPEC-SB336 | GPEC-SB336 |
| | | | Sample Name | GPEC-SB/PZ333 | GPEC-SB/PZ333 | GPEC-SB/PZ504 | GPEC-SB334 (3-3.5) | GPEC-SB334 (24-25) | GPEC-SB334 (74-75) | GPEC-SB336 (2.5-3) | GPEC-SB336 (9-10) | GPEC-SB336 (22-23) |
| | | | Start Depth | 21 | 79 | 79 | 3 | 24 | 74 | 2.5 | 9 | 22 |
| | | | End Depth | 22 | 80 | 80 | 3.5 | 25 | 75 | 3 | 10 | 23 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/13/2015 | 7/14/2015 | 7/14/2015 | 3/17/2015 | 7/16/2015 | 7/16/2015 | 3/24/2015 | 4/1/2015 | 4/1/2015 |
| | | | Parent Sample Code | | | GPEC-SB/PZ-333 | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 UJ | 0.075 UJ |
| Benzyl alcohol | 100-51-6 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 1.99 U | 0.039 U | 0.036 U | **0.245 D** | 1.79 U | 0.036 U | **0.152** | 0.039 U | 0.075 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Carbazole | 86-74-8 | NE | NE | **3.64 D** | 0.039 U | 0.036 U | **0.747 D** | **2.21 D** | 0.036 U | **0.888** | 0.039 U | 0.075 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **69.3 D** | 0.039 U | 0.036 U | **0.651 D** | **34.6 D** | 0.036 U | **0.588** | **0.068** | 0.075 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 UJ | 0.075 UJ |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Hexachloroethane | 67-72-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Isophorone | 78-59-1 | NE | 4.4 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Pyridine | 110-86-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 1.99 U | 0.039 U | 0.036 U | 0.192 U | 1.79 U | 0.036 U | 0.075 U | 0.039 U | 0.075 U |
| Total SVOCs | TSVOC | NE | NE | **18304.14** | **0.469** | **0.407** | **103.94** | **3657.47** | **0.157** | **97.723** | **3.324** | **2.662** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.289 U | 0.022 U | 0.022 U | 0.023 U | 0.125 U | 0.021 U | 0.046 U | 0.024 U | 0.091 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB/PZ-333** | **GPEC-SB/PZ-333** | **GPEC-SB/PZ-333** | **GPEC-SB334** | **GPEC-SB334** | **GPEC-SB334** | **GPEC-SB336** | **GPEC-SB336** | **GPEC-SB336** |
| **Sample Name** | | | | **GPEC-SB/PZ333** | **GPEC-SB/PZ333** | **GPEC-SB/PZ504** | **GPEC-SB334 (3-3.5)** | **GPEC-SB334 (24-25)** | **GPEC-SB334 (74-75)** | **GPEC-SB336 (2.5-3)** | **GPEC-SB336 (9-10)** | **GPEC-SB336 (22-23)** |
| **Start Depth** | | | | **21** | **79** | **79** | **3** | **24** | **74** | **2.5** | **9** | **22** |
| **End Depth** | | | | **22** | **80** | **80** | **3.5** | **25** | **75** | **3** | **10** | **23** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **7/13/2015** | **7/14/2015** | **7/14/2015** | **3/17/2015** | **7/16/2015** | **7/16/2015** | **3/24/2015** | **4/1/2015** | **4/1/2015** |
| Parent Sample Code | | | | | | GPEC-SB/PZ-333 | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | 0.057 U | NA | NA | 0.057 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | 0.00453 U | NA | NA | **0.00636** | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | **0.039** | NA | NA | 0.00457 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | **0.02** | NA | NA | 0.00457 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | **0.05** | NA | NA | 0.00457 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | **0.024** | NA | NA | 0.00457 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | 0.00453 U | NA | NA | 0.00457 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | 0.057 U | NA | NA | 0.057 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | 0.019 U | NA | NA | 0.019 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | 0.019 U | NA | NA | 0.019 U | NA | NA |
| | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **864** | **4580** | **4510** | **6010** | **9410** | **7180** | **6470** | **11100** | **6720** |
| Antimony | 7440-36-0 | NE | NE | **4.56** | 0.58 U | 0.596 U | **2.4** | **5.63** | 0.56 U | **9.74** | **0.559 J** | 1.25 U |
| Arsenic | 7440-38-2 | 16 | 16 | **49** | **1.34** | **1.11** | **9.49** | **17.5** | **1.16** | **22.8** | **4** | **35.8** |
| Barium | 7440-39-3 | 10000 | 820 | **12.6** | **33** | **27** | **108** | **140** | **63.8** | **314** | **67** | **63.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.809 U | **0.333 J** | **0.26 J** | **0.458 J** | **0.434 J** | **0.348 J** | **0.601 J** | **0.515 J** | 1.25 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.851** | 0.58 U | 0.596 U | **0.665** | **0.627 J** | 0.56 U | **1.06** | 0.636 U | **0.457 J** |
| Calcium | 7440-70-2 | NE | NE | **7080** | **5500** | **5110** | **2260** | **4590** | **7530** | **3910** | **6160** | **128000** |
| Chromium | 7440-47-3 | NE | NE | **30.2** | **12.6** | **11.9** | **20.5** | **26.5** | **18.9** | **26.9** | **24.7** | **12.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.54 U | 1.16 U | 1.14 U | 1.19 U | 1.38 U | 1.12 U | 1.15 U | 1.19 U | 2.31 U |
| Cobalt | 7440-48-4 | NE | NE | **23.3** | **5.15** | **4.45** | **6.12** | **9.78** | **5.83** | **7.22** | **7.43** | **2.97** |
| Copper | 7440-50-8 | 10000 | 1720 | **294** | **10.7** | **33.3** | **137** | **139** | **12.9** | **240** | **35.7** | **18.5** |
| Iron | 7439-89-6 | NE | NE | **169000 D** | **20300** | **16000** | **22700** | **39000** | **22900** | **20900** | **26100** | **10000** |
| Lead | 7439-92-1 | 3900 | 450 | **237** | **4.4** | **4.16** | **237** | **504** | **4.77** | **493** | **65.5** | **132** |
| Magnesium | 7439-95-4 | NE | NE | **1290** | **4300** | **3900** | **1640** | **2020** | **4500** | **1730** | **2670** | **5210** |
| Manganese | 7439-96-5 | 10000 | 2000 | **621** | **553** | **260** | **388** | **387** | **310** | **279** | **326** | **282** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.047** | **0.0055 J** | **0.0033 J** | **0.383** | **0.059** | **0.025** | **2.89** | **0.209** | **5.01 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **61.8** | **10.8** | **10.8** | **18.9** | **20** | **13** | **23.4** | **16.3** | **8.97** |
| Potassium | 7440-09-7 | NE | NE | **469** | **851** | **881** | **706** | **1010** | **1180** | **748** | **1370** | **1350** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.71** | **1.16** | **1.72** | **1.51** | **3.32** | **1.28** | **2.21** | **1.68** | **2.35** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.439 J** | 0.58 U | 0.596 U | **0.261 J** | **0.613 J** | 0.56 U | **0.624** | 0.636 U | 1.25 U |
| Sodium | 7440-23-5 | NE | NE | **2650** | **188** | **212** | **148** | **375** | **540** | **148** | **134** | **6990** |
| Thallium | 7440-28-0 | NE | NE | **0.787 J** | 0.58 U | **0.219 J** | **0.165 J** | **1.12** | **1.15** | **0.275 J** | 0.636 U | 1.25 U |
| Vanadium | 7440-62-2 | NE | NE | **85.3** | **23.4** | **19.8** | **29.3** | **36.9** | **34** | **32.9** | **37** | **18** |
| Zinc | 7440-66-6 | 10000 | 2480 | **154** | **21** | **19.1** | **269** | **279** | **24.7** | **556** | **67.9** | **1230** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.8 U | 2.9 U | 2.8 U | 2.9 U | 3.4 U | 2.8 U | 2.9 U | 3 U | 5.8 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **318000** | 1000 U | 1000 U | **17000** | **63700** | **1290** | **53200** | **4730** | **67700** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB339** | **GPEC-SB339** | **GPEC-SB339** | **GPEC-SB/PZ-340** | **GPEC-SB/PZ-340** | **GPEC-SB341** | **GPEC-SB341** | **GPEC-SB341** | **GPEC-SB/PZ-342** |
| **Sample Name** | | | | **GPEC-SB341A (5-5.5)** | **GPEC-SB339 (19-20)** | **GPEC-SB339 (64-65)** | **GPEC-SB/PZ340 (4.5-5)** | **GPEC-SB/PZ340 (21-22)** | **GPEC-SB341 (14.5-15)** | **GPEC-SB341 (28-28.5)** | **GPEC-SB341B (5-5.5)** | **GPEC-SB/PZ342 (5.5-6)** |
| **Start Depth** | | | | **5** | **19** | **64** | **4.5** | **21** | **14.5** | **28** | **5** | **5.5** |
| **End Depth** | | | | **5.5** | **20** | **65** | **5** | **22** | **15** | **28.5** | **5.5** | **6** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/18/2015** | **7/28/2015** | **7/28/2015** | **3/24/2015** | **4/1/2015** | **3/30/2015** | **3/30/2015** | **3/18/2015** | **3/19/2015** |
| Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00593 U | **0.904 D** | 0.00553 U | 0.00635 U | **0.00265 J** | **2.01 J** | **0.038 J** | 0.00586 U | 0.00588 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | **0.317 J** | **0.00475 J** | 0.00586 U | 0.00588 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00593 U | **10.2 D** | 0.00553 U | 0.00635 U | 0.00943 UJ | **7.76 J** | **0.079 J** | 0.00586 U | 0.00588 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | **0.884 D** | 0.011 U | 0.013 U | 0.019 UJ | **3.14 J** | **0.022 J** | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | **11.988** | ND | ND | **0.00265** | **13.227** | **0.14375** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.03 U | 0.467 U | 0.028 U | 0.032 U | 0.047 UJ | 1.22 UJ | **0.145 J** | 0.029 U | 0.029 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.119 U | 4.67 U | 0.111 U | 0.127 U | 0.189 R | 12.2 R | 0.291 R | 0.117 U | 0.118 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.119 U | 4.67 U | 0.111 U | 0.127 U | 0.189 UJ | 12.2 UJ | 0.291 UJ | 0.117 U | 0.118 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Bromoform | 75-25-2 | NE | NE | 0.00593 U | 0.233 U | 0.011 U | 0.00635 U | 0.00943 UJ | 1.22 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 0.233 U | 0.00553 U | 0.013 U | 0.019 UJ | 0.612 UJ | 0.029 UJ | 0.012 U | 0.012 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | **0.018 J** | 0.00586 U | 0.00588 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.467 U | 0.022 U | 0.025 U | 0.038 R | 1.22 R | 0.058 R | 0.023 U | 0.024 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | **0.016 J** | 0.612 UJ | **0.06 J** | 0.00586 U | 0.00588 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.012 U | 0.233 U | 0.00553 U | 0.013 U | 0.019 UJ | 0.612 UJ | 0.029 UJ | 0.012 U | 0.012 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.017 CD** | 0.467 U | 0.011 U | **0.028 CD** | 0.019 UJ | 1.22 UJ | 0.029 UJ | **0.015 CD** | **0.028 CD** |
| Styrene | 100-42-5 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00593 U | 0.233 U | **0.012 D** | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | **0.00345 DJ** | 0.00588 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00593 U | 0.233 U | 0.00553 U | 0.00635 U | 0.00943 UJ | 0.612 UJ | 0.015 UJ | 0.00586 U | 0.00588 U |
| Total VOCs | TVOC | NE | NE | **0.017** | **11.988** | **0.012** | **0.028** | **0.01865** | **13.227** | **0.36675** | **0.01845** | **0.028** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.104** | **1.26** | 0.035 U | **2.29 D** | **0.683** | **3.82** | **0.427** | **14.7 D** | **0.074** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.253** | **0.348** | 0.035 U | **1.52 D** | **0.344** | **0.308** | **0.073 J** | **4.51 D** | **0.709** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.521** | **0.957** | 0.035 U | **6.07 D** | **1.52** | **2.18** | **0.255** | **34.3 D** | **0.61** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.11** | **0.299** | 0.035 U | **11.8 D** | **3.73** | **2.28** | **0.418** | **24.9 D** | **0.621** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **3.31** | **2.2** | 0.035 U | **41.3 D** | **5.36** | **4.66** | **0.707** | **166 D** | **1.03** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.164** | **1.32** | 0.035 U | **2.34 D** | **0.596** | **3.27** | **0.167** | **19.8 D** | **0.19** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.099** | **9.23 D** | 0.035 U | **0.555 D** | **0.339** | **0.955** | **0.123** | **10.1 D** | **0.137** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.149** | **30.7 D** | 0.035 U | **1.02 D** | **1.3** | **4.83** | **0.528** | **17.1 D** | **0.343** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.43** | **4.74** | 0.035 U | **30.3 D** | **4.23** | **5.42** | **0.507** | **190 D** | **0.53** |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.01** | **2.56** | 0.035 U | **32.6 D** | **5.04** | **7.23** | **0.987** | **113 D** | **1.16** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.61** | **1.15** | 0.035 U | **19 D** | **3.66** | **3.81** | **0.405** | **59.1 D** | **0.741** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.87** | **0.721** | 0.035 U | **24.2 D** | **5.64** | **3.86** | **0.585** | **49.8 D** | **1.16** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.94** | **0.49** | 0.035 U | **22.7 D** | **4.2** | **3.45** | **0.33** | **58.1 D** | **0.95** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.28** | **0.427** | 0.035 U | **17.4 D** | **3.41** | **2.62** | **0.593** | **32.8 D** | **0.619** |
| Chrysene | 218-01-9 | 110 | 1 | **1.81** | **1.11** | 0.035 U | **19.1 D** | **5.01** | **3.9** | **0.622** | **60.7 D** | **0.735** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.364** | **0.134** | 0.035 U | **4.27 D** | **0.975** | **0.772** | **0.095** | **11.4 D** | **0.216** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.971** | **0.293** | 0.035 U | **11.7 D** | **2.6** | **1.97** | **0.323** | **23.9 D** | **0.531** |
| Total PAHs | TPAH | NE | NE | **19.995** | **57.939** | ND | **248.165** | **48.637** | **55.335** | **7.145** | **890.21** | **10.356** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB339 | GPEC-SB339 | GPEC-SB339 | GPEC-SB/PZ-340 | GPEC-SB/PZ-340 | GPEC-SB341 | GPEC-SB341 | GPEC-SB341 | GPEC-SB/PZ-342 |
| Sample Name | | | | GPEC-SB341A (5-5.5) | GPEC-SB339 (19-20) | GPEC-SB339 (64-65) | GPEC-SB/PZ340 (4.5-5) | GPEC-SB/PZ340 (21-22) | GPEC-SB341 (14.5-15) | GPEC-SB341 (28-28.5) | GPEC-SB341B (5-5.5) | GPEC-SB/PZ342 (5.5-6) |
| Start Depth | | | | 5 | 19 | 64 | 4.5 | 21 | 14.5 | 28 | 5 | 5.5 |
| End Depth | | | | 5.5 | 20 | 65 | 5 | 22 | 15 | 28.5 | 5.5 | 6 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 3/18/2015 | 7/28/2015 | 7/28/2015 | 3/24/2015 | 4/1/2015 | 3/30/2015 | 3/30/2015 | 3/18/2015 | 3/19/2015 |
| Parent Sample Code | | | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 UJ | 0.039 UJ | 0.094 UJ | 0.768 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.285** | 0.039 U | 0.035 U | 0.411 U | 0.063 U | **0.148** | 0.094 U | 0.768 U | **0.433** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | **0.11** | 0.039 U | 0.035 U | **2.12 D** | **0.378** | **0.315** | **0.099** | **14.8 D** | **0.048** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.068** | **0.219** | 0.035 U | **1.34 D** | **0.354** | **0.821** | **0.1** | **13.9 D** | **0.033 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | **0.596** | 0.768 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.388 U | 0.355 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 0.388 U | 0.355 U | 0.411 U | 0.063 UJ | 0.039 UJ | 0.094 UJ | 0.768 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.388 U | 0.355 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | **0.142** | 0.039 U | **0.694** | 0.768 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.039 U | 0.035 U | 0.411 U | 0.063 U | 0.039 U | 0.094 U | 0.768 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **20.458** | **58.158** | ND | **251.625** | **49.511** | **56.619** | **8.634** | **918.91** | **10.87** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.471** | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.356** | 0.023 U | 0.021 U | 0.049 U | 0.038 U | 0.024 U | 0.054 U | 0.023 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.827** | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB339 | GPEC-SB339 | GPEC-SB339 | GPEC-SB/PZ-340 | GPEC-SB/PZ-340 | GPEC-SB341 | GPEC-SB341 | GPEC-SB341 | GPEC-SB/PZ-342 |
| Sample Name | | | | GPEC-SB341A (5-5.5) | GPEC-SB339 (19-20) | GPEC-SB339 (64-65) | GPEC-SB/PZ340 (4.5-5) | GPEC-SB/PZ340 (21-22) | GPEC-SB341 (14.5-15) | GPEC-SB341 (28-28.5) | GPEC-SB341B (5-5.5) | GPEC-SB/PZ342 (5.5-6) |
| Start Depth | | | | 5 | 19 | 64 | 4.5 | 21 | 14.5 | 28 | 5 | 5.5 |
| End Depth | | | | 5.5 | 20 | 65 | 5 | 22 | 15 | 28.5 | 5.5 | 6 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 3/18/2015 | 7/28/2015 | 7/28/2015 | 3/24/2015 | 4/1/2015 | 3/30/2015 | 3/30/2015 | 3/18/2015 | 3/19/2015 |
| Parent Sample Code | | | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.056 U | NA | NA | 0.061 U | NA | NA | NA | 0.058 U | **0.045 J** |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | **0.00698** |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00449 U | NA | NA | **0.01** | NA | NA | NA | 0.00462 U | **0.00428 J** |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | **0.066** | 0.00462 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | **0.046** | **0.014** |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | **0.00291 J** |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00449 U | NA | NA | 0.00488 U | NA | NA | NA | 0.00462 U | 0.00462 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.056 U | NA | NA | 0.061 U | NA | NA | NA | 0.058 U | 0.058 U |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | NA | 0.02 U | NA | NA | NA | 0.02 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | NA | 0.02 U | NA | NA | NA | 0.02 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **13400** | **11900** | **3750** | **7090** | **13300** | **10900** | **17600** | **8790** | **8240** |
| Antimony | 7440-36-0 | NE | NE | **8.19** | 0.628 U | 0.588 U | **19.1** | **2.51** | **8.27** | **15.9** | **3.48** | |
| Arsenic | 7440-38-2 | 16 | 16 | **10.3** | **2.56** | **1.16** | **36.3** | **45.3** | **11.5** | **32.4** | **25** | **15.6** |
| Barium | 7440-39-3 | 10000 | 820 | **316** | **48** | **19.5** | **452** | **127** | **158** | **102** | **515** | **151** |
| Beryllium | 7440-41-7 | 2700 | 47 | **33.1** | **0.734** | **0.423 J** | **0.615 J** | **0.646 J** | **0.516 J** | **0.863 J** | **20** | **3.93** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.943** | 0.628 U | 0.588 U | **1.2** | **0.964 J** | **0.352 J** | **4.08** | **2.73** | **1.2** |
| Calcium | 7440-70-2 | NE | NE | **16500** | **1880** | **877** | **4320** | **82600** | **3170** | **11500** | **6280** | **2840** |
| Chromium | 7440-47-3 | NE | NE | **302** | **31.4** | **17.3** | **32.1** | **30** | **25.9** | **42** | **202** | **56.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **17.2** | 1.17 U | 1.11 U | 1.27 U | 1.89 U | 1.22 U | 2.91 U | 1.2 U | **2.91** |
| Cobalt | 7440-48-4 | NE | NE | **55.5** | **8.1** | **4.46** | **8.1** | **8.1** | **7.37** | **8.48** | **35.2** | **13.2** |
| Copper | 7440-50-8 | 10000 | 1720 | **1030** | **25** | **12.1** | **373** | **159** | **52.9** | **286** | **885** | **297** |
| Iron | 7439-89-6 | NE | NE | **57100** | **26700** | **19800** | **23300** | **20300** | **25700** | **18500** | **57400 D** | **26200** |
| Lead | 7439-92-1 | 3900 | 450 | **1800** | **22** | **7.4** | **668** | **321** | **383** | **461** | **1750** | **702** |
| Magnesium | 7439-95-4 | NE | NE | **8440** | **2830** | **1060** | **1620** | **4220** | **2230** | **3760** | **2550** | **2460** |
| Manganese | 7439-96-5 | 10000 | 2000 | **690** | **240** | **199** | **294** | **278** | **386** | **157** | **622** | **370** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.618** | **0.017** | 0.0065 U | **25.6 D** | **13.4 J** | **3.81 J** | **3.62 J** | **1.2** | **0.999** |
| Nickel | 7440-02-0 | 10000 | 130 | **499** | **15.7** | **11.2** | **27.7** | **26** | **16.2** | **47.7** | **278** | **83.3** |
| Potassium | 7440-09-7 | NE | NE | **1160** | **1830** | **433** | **803** | **1640** | **1100** | **1830** | **891** | **876** |
| Selenium | 7782-49-2 | 6800 | 4 | **4.57** | **1.55** | **1.12** | **2.35** | **3.41** | **2.01** | **4.74** | **3.7** | **1.79** |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.71** | 0.628 U | 0.588 U | **0.916** | **0.567 J** | 0.61 U | **0.755 J** | **1.04** | **0.355 J** |
| Sodium | 7440-23-5 | NE | NE | **963** | **182** | **129** | **177** | **3660** | **157** | **2000** | **550** | **196** |
| Thallium | 7440-28-0 | NE | NE | 0.617 U | **0.254 J** | 0.588 U | **0.359 J** | **0.319 J** | **1.49** | **0.675 J** | **0.199 J** | 0.622 U |
| Vanadium | 7440-62-2 | NE | NE | **46.3** | **42** | **22** | **36.8** | **35.4** | **35.9** | **44** | **54** | **36.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **4530** | **69.1** | **39.3** | **528** | **796** | **284** | **528** | **3500** | **818** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 2.9 U | 2.8 U | 3.2 U | 4.7 U | 3.1 U | 7.3 U | 2.9 U | 2.9 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **25500** | **3600** | 1000 U | **40200** | **74500** | **13700** | **94400** | **39400** | **14700** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB/PZ-342 | GPEC-SB/PZ-342 | GPEC-SB343 | GPEC-SB/PZ-343 | GPEC-SB/PZ-343 | GPEC-SB344 | GPEC-SB344 | GPEC-SB344 |
| | | | | Sample Name | GPEC-SB/PZ342 (10-11) | GPEC-SB/PZ342 (18-19) | GPEC-SB343 (2.5-3) | GPEC-SB/PZ343 (14-15) | GPEC-SB/PZ343 (22-23) | GPEC-SB344 (2.5-3) | GPEC-SB501 (2.5-3) | GPEC-SB344 (12-13) |
| | | | | Start Depth | 10 | 18 | 2.5 | 14 | 22 | 2.5 | 2.5 | 12 |
| | | | | End Depth | 11 | 19 | 3 | 15 | 23 | 3 | 3 | 13 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/31/2015 | 3/31/2015 | 3/19/2015 | 3/31/2015 | 3/31/2015 | 3/23/2015 | 3/23/2015 | 7/27/2015 |
| | | | | Parent Sample Code | | | | | | | GPEC-SB-344 (2.5-3) | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | **0.263 J** | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | **0.00247 DJ** | **0.00404 DJ** |
| Toluene | 108-88-3 | 1000 | 0.7 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | | **0.373 J** | 0.00665 UJ | 0.00568 U | 1.22 UJ | **0.013 J** | 0.00608 U | 0.00602 U | 0.00639 U |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | 1.17 UJ | 0.013 UJ | 0.011 U | **3.41 J** | **0.012 J** | 0.012 U | 0.012 U | 0.013 U |
| Total BTEX | TBTEX | NE | NE | | **0.636** | ND | ND | **3.41** | **0.025** | ND | **0.00247** | **0.00404** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 1.17 UJ | 0.033 UJ | 0.028 U | 2.43 UJ | 0.059 UJ | 0.03 U | 0.03 U | 0.032 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 11.7 R | 0.133 R | 0.114 U | 24.3 R | 0.236 R | 0.122 U | 0.12 U | 0.128 U |
| Acrylonitrile | 107-13-1 | NE | NE | | 11.7 UJ | 0.133 UJ | 0.114 U | 24.3 UJ | 0.236 UJ | 0.122 U | 0.12 U | 0.128 U |
| Bromodichloromethane | 75-27-4 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Bromoform | 75-25-2 | NE | NE | | 1.17 UJ | 0.00665 UJ | 0.00568 U | 2.43 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.013 U |
| Bromomethane | 74-83-9 | NE | NE | | 0.585 UJ | 0.013 UJ | 0.011 U | 1.22 UJ | 0.024 UJ | 0.012 U | 0.012 U | 0.00639 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | **0.013 J** | 0.00608 U | 0.00602 U | 0.00639 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 1.17 R | 0.027 R | 0.023 U | 2.43 R | 0.047 R | 0.024 U | 0.024 U | 0.026 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | 0.585 UJ | **0.012 J** | 0.00568 U | 1.22 UJ | **0.092 J** | 0.00608 U | 0.00602 U | 0.00639 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Chloroethane | 75-00-3 | NE | 1.9 | | 0.585 UJ | 0.013 UJ | 0.011 U | 1.22 UJ | 0.024 UJ | 0.012 U | 0.012 U | 0.00639 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Chloroform | 67-66-3 | 700 | 0.37 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Chloromethane | 74-87-3 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Dibromochloromethane | 124-48-1 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Diisopropyl ether | 108-20-3 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 2-Hexanone | 591-78-6 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | 1.17 UJ | 0.013 UJ | **0.013 CD** | 2.43 UJ | 0.024 UJ | **0.02 CD** | **0.018 CD** | **0.038 CD** |
| Styrene | 100-42-5 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | **0.578 J** | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | **0.013 D** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | **0.392 J** | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Vinyl acetate | 108-05-4 | NE | NE | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 0.585 UJ | 0.00665 UJ | 0.00568 U | 1.22 UJ | 0.012 UJ | 0.00608 U | 0.00602 U | 0.00639 U |
| Total VOCs | TVOC | NE | NE | | **1.028** | **0.012** | **0.013** | **3.988** | **0.13** | **0.02** | **0.02047** | **0.05504** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | **1.15** | **0.394** | **0.119** | **5.95** | 0.078 U | **1.02** | **0.829 D** | 0.042 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | **0.335** | **0.214** | **0.191** | **0.857** | 0.078 U | **0.43** | **0.355 D** | 0.042 U |
| Anthracene | 120-12-7 | 1000 | 1000 | | **1.49** | **0.787** | **0.421** | **8.34** | 0.078 U | **2.42** | **1.81 D** | **0.047** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | **1.16** | **2.64** | **0.713** | **6.51** | 0.078 U | **3.9** | **6.07 D** | **0.064** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | **3.37** | **3.03** | **1.74** | **19.2** | 0.078 U | **12 D** | **13.6 D** | **0.259** |
| Fluorene | 86-73-7 | 1000 | 386 | | **1.87** | **0.393** | **0.145** | **6.89** | 0.078 U | **0.829** | **0.703 D** | **0.025 J** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | **1.06** | **0.234** | **0.069** | **5.78** | 0.078 U | **0.308** | **0.249 D** | 0.042 U |
| Naphthalene | 91-20-3 | 1000 | 12 | | **0.62** | **0.706** | **0.104** | **14.3** | **0.055 J** | **0.576** | **0.445 D** | **0.095** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | **5.32** | **2.6** | **1.17** | **21.8** | **0.061 J** | **9.09 D** | **10.4 D** | **0.178** |
| Pyrene | 129-00-0 | 1000 | 1000 | | **4.89** | **3.68** | **1.64** | **18.8** | 0.078 U | **10.7 D** | **14.2 D** | **0.239** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | **1.97** | **2.45** | **0.94** | **8.68** | 0.078 U | **6.24 D** | **6.96 D** | **0.134** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | **1.94** | **3.54** | **1.16** | **9.38** | 0.078 U | **7.97 D** | **9.1 D** | **0.093** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | **1.38** | **2.37** | **1.17** | **7.22** | 0.078 U | **7.76 D** | **8.06 D** | **0.108** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | **1.59** | **2.82** | **0.697** | **8.29** | 0.078 U | **5.77** | **6.69 D** | **0.074** |
| Chrysene | 218-01-9 | 110 | 1 | | **2.26** | **3.69** | **1.05** | **8.69** | 0.078 U | **6.47 D** | **7.69 D** | **0.133** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | **0.339** | **0.59** | **0.221** | **2.63** | 0.078 U | **1.65** | **1.91 D** | 0.042 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | **0.968** | **1.8** | **0.586** | **5.3** | 0.078 U | **4.65** | **5.17 D** | **0.061** |
| Total PAHs | TPAH | NE | NE | | **31.712** | **31.938** | **12.136** | **158.617** | **0.116** | **81.783** | **94.241** | **1.51** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB/PZ-342** | **GPEC-SB/PZ-342** | **GPEC-SB343** | **GPEC-SB/PZ-343** | **GPEC-SB/PZ-343** | **GPEC-SB344** | **GPEC-SB344** | **GPEC-SB344** |
| **Sample Name** | | | | **GPEC-SB/PZ342 (10-11)** | **GPEC-SB/PZ342 (18-19)** | **GPEC-SB343 (2.5-3)** | **GPEC-SB/PZ343 (14-15)** | **GPEC-SB/PZ343 (22-23)** | **GPEC-SB344 (2.5-3)** | **GPEC-SB501 (2.5-3)** | **GPEC-SB344 (12-13)** |
| **Start Depth** | | | | **10** | **18** | **2.5** | **14** | **22** | **2.5** | **2.5** | **12** |
| **End Depth** | | | | **11** | **19** | **3** | **15** | **23** | **3** | **3** | **13** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/31/2015** | **3/31/2015** | **3/19/2015** | **3/31/2015** | **3/31/2015** | **3/23/2015** | **3/23/2015** | **7/27/2015** |
| Parent Sample Code | | | | | | | | | | GPEC-SB-344 (2.5-3) | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.039 UJ | 0.044 UJ | 0.038 U | 0.235 UJ | 0.078 UJ | 0.041 U | 0.158 U | 0.042 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **1.09** | **0.035 J** | **0.492** | 0.235 U | **0.051 J** | **0.269** | **0.179 D** | 0.042 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Carbazole | 86-74-8 | NE | NE | **0.255** | **0.18** | **0.105** | **4.74** | 0.078 U | **0.858** | **0.654 D** | 0.042 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.434** | **0.22** | **0.081** | **5.58** | 0.078 U | **0.513** | **0.431 D** | 0.042 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.044 U | 0.038 U | **0.29** | **0.385** | 0.041 U | 0.158 U | 0.042 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.418 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 UJ | 0.044 UJ | 0.038 U | 0.235 UJ | 0.078 UJ | 0.041 U | 0.158 U | 0.418 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.418 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.044 U | 0.038 U | **0.467** | **1.11** | 0.041 U | 0.158 U | 0.042 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Pyridine | 110-86-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.044 U | 0.038 U | 0.235 U | 0.078 U | 0.041 U | 0.158 U | 0.042 U |
| Total SVOCs | TSVOC | NE | NE | **33.491** | **32.373** | **12.814** | **169.694** | **1.662** | **83.423** | **95.505** | **1.51** |
| **PCBs (mg/kg)** | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.026 U | 0.021 U | 0.045 U | 0.047 U | 0.048 U | 0.047 U | 0.025 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | Location Name | GPEC-SB/PZ-342 | GPEC-SB/PZ-342 | GPEC-SB343 | GPEC-SB/PZ-343 | GPEC-SB/PZ-343 | GPEC-SB344 | GPEC-SB344 | GPEC-SB344 |
| | | | Sample Name | GPEC-SB/PZ342 (10-11) | GPEC-SB/PZ342 (18-19) | GPEC-SB343 (2.5-3) | GPEC-SB/PZ343 (14-15) | GPEC-SB/PZ343 (22-23) | GPEC-SB344 (2.5-3) | GPEC-SB501 (2.5-3) | GPEC-SB344 (12-13) |
| | | | Start Depth | 10 | 18 | 2.5 | 14 | 22 | 2.5 | 2.5 | 12 |
| | | | End Depth | 11 | 19 | 3 | 15 | 23 | 3 | 3 | 13 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2015 | 3/31/2015 | 3/19/2015 | 3/31/2015 | 3/31/2015 | 3/23/2015 | 3/23/2015 | 7/27/2015 |
| | | | Parent Sample Code | | | | | | | GPEC-SB-344 (2.5-3) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.053 U | NA | NA | 0.06 U | 0.058 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00426 U | NA | NA | **0.00813** | **0.00736** | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | **0.016** | NA | NA | 0.00478 U | 0.00466 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | **0.00294 J** | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00426 U | NA | NA | 0.00478 U | 0.00466 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.053 U | NA | NA | 0.06 U | 0.058 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.019 U | NA | NA | 0.02 U | 0.02 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.019 U | NA | NA | 0.02 U | 0.02 U | NA |
| | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3210** | **7040** | **8080** | **7560** | **20300** | **8220** | **8550** | **8980** |
| Antimony | 7440-36-0 | NE | NE | **1.52** | **2.94** | **2.57** | **0.714** | 1.26 U | **13.9** | **15.3** | **0.651 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **7.28** | **12.9** | **15** | **5.63** | **3.89** | **24.9** | **24.1** | **8.17** |
| Barium | 7440-39-3 | 10000 | 820 | **44.9** | **318** | **118** | **131** | **45.4** | **485** | **557** | **193** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.617 U | **0.414 J** | **1.54** | **0.419 J** | **1.37** | **0.664** | **0.597 J** | **0.482 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.34 J** | **0.544 J** | **0.479 J** | 0.657 U | 1.26 U | **1.63** | **1.48** | **0.173 J** |
| Calcium | 7440-70-2 | NE | NE | **1350** | **2180** | **6150** | **51600** | **7000** | **4640** | **4710** | **5460** |
| Chromium | 7440-47-3 | NE | NE | **15.1** | **35.2** | **31.6** | **18.2** | **41.2** | **30.7** | **31.4** | **19.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.17 U | 1.33 U | 1.16 U | 1.22 U | 2.36 U | 1.22 U | 1.2 U | 1.28 U |
| Cobalt | 7440-48-4 | NE | NE | **2.52** | **7.85** | **9.57** | **5.01** | **9.26** | **9.33** | **8.91** | **6.44** |
| Copper | 7440-50-8 | 10000 | 1720 | **54.5** | **1360** | **165** | **33.7** | **16.9** | **488** | **434** | **32.5** |
| Iron | 7439-89-6 | NE | NE | **8690** | **41600** | **27600** | **12400** | **32600** | **33700** | **25800** | **19500** |
| Lead | 7439-92-1 | 3900 | 450 | **98.8** | **1780** | **292** | **200** | **13.9** | **630** | **717** | **478** |
| Magnesium | 7439-95-4 | NE | NE | **945** | **2400** | **4310** | **22800** | **5140** | **2560** | **2290** | **2080** |
| Manganese | 7439-96-5 | 10000 | 2000 | **91.7** | **327** | **425** | **309** | **148** | **683** | **1040** | **311** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.457** | **19.4 J** | **0.76** | **0.406** | **0.081** | **2.44 D** | **1.59** | **0.686** |
| Nickel | 7440-02-0 | 10000 | 130 | **9.46** | **15.6** | **34.1** | **14.4** | **16.2** | **51.5** | **56.6** | **14.7** |
| Potassium | 7440-09-7 | NE | NE | **309** | **939** | **1120** | **1020** | **1770** | **932** | **1020** | **1020** |
| Selenium | 7782-49-2 | 6800 | 4 | 0.617 U | **1.92** | **2.13** | **1.83** | **3.28** | **2.63** | **2.23** | **3.57** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.617 U | **0.699** | **0.264 J** | **0.176 J** | 1.26 U | **10.1** | **8.4** | **0.216 J** |
| Sodium | 7440-23-5 | NE | NE | **86.6** | **756** | **147** | **338** | **4260** | **129** | **156** | **152** |
| Thallium | 7440-28-0 | NE | NE | 0.617 U | 0.696 U | **0.154 J** | **0.224 J** | **0.365 J** | **1.38** | **0.423 J** | **0.222 J** |
| Vanadium | 7440-62-2 | NE | NE | **16.8** | **29.5** | **46.3** | **25.8** | **63.4** | **38.5** | **39.4** | **30** |
| Zinc | 7440-66-6 | 10000 | 2480 | **98.2** | **613** | **260** | **58.6** | **22.5** | **1090** | **757** | **152** |
| **Cyanides (mg/kg)** | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3.3 U | 2.8 U | 3 U | 5.9 U | 3 U | 3 U | 3.2 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **8410** | **46600** | **15200** | **24500** | **98500** | **50100** | **35900** | **6630** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB344 | GPEC-SB347 | GPEC-SB347 | GPEC-SB347 | GPEC-SB348 | GPEC-SB348 | GPEC-SB348 | GPEC-SB349 | GPEC-SB349 |
| Sample Name | | | | GPEC-SB344 (79-80) | GPEC-SB347 (1.5-2) | GPEC-SB347 (9-10) | GPEC-SB347 (22-23) | GPEC-SB348 (5-5.5) | GPEC-SB348 (12.5-13) | GPEC-SB348 (29.5-30) | GPEC-SB349 (5) | GPEC-SB349 (15-17) |
| Start Depth | | | | 79 | 1.5 | 9 | 22 | 5 | 12.5 | 29.5 | 5 | 15 |
| End Depth | | | | 80 | 2 | 10 | 23 | 5.5 | 13 | 30 | 5.5 | 17 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 7/23/2015 | 3/18/2015 | 4/1/2015 | 4/1/2015 | 3/19/2015 | 3/30/2015 | 3/30/2015 | 3/21/2016 | 3/23/2016 |
| Parent Sample Code | | | | | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | 0.00575 UJ | 62.4 U | **0.061 J** | **0.173 J** | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | **0.014 J** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00575 UJ | 62.4 U | **0.038 J** | **0.129 J** | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00575 UJ | 62.4 U | 0.061 UJ | **0.276 J** | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | **0.031 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 UJ | 125 U | 0.121 UJ | **0.57 J** | 0.011 U | 0.011 UJ | 0.012 UJ | 0.013 UJ | **0.029 J** |
| Total BTEX | TBTEX | NE | NE | ND | ND | **0.099** | **1.148** | ND | ND | ND | ND | **0.074** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 UJ | 125 U | **1.2 J** | **1.98 J** | 0.028 U | 0.028 UJ | 0.03 UJ | **0.128 J** | **0.107 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.115 UJ | 1250 U | 1.21 R | 5.28 R | 0.11 U | 0.11 R | 0.119 R | 0.126 UJ | 0.124 UJ |
| Acrylonitrile | 107-13-1 | NE | NE | 0.115 UJ | 1250 U | 1.21 UJ | 5.28 UJ | 0.11 U | 0.11 UJ | 0.119 UJ | 0.126 UJ | 0.124 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Bromoform | 75-25-2 | NE | NE | 0.012 UJ | 62.4 U | 0.121 UJ | 0.528 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Bromomethane | 74-83-9 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.011 U | 0.011 UJ | 0.012 UJ | 0.00631 UJ | 0.00619 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | **0.012 J** | **0.016 J** |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.023 UJ | 125 U | 0.121 R | 0.528 R | 0.022 U | 0.022 R | 0.024 R | 0.013 UJ | 0.012 UJ |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | **0.009 J** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.013 UJ | 0.012 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.011 U | 0.011 UJ | 0.012 UJ | 0.00631 UJ | 0.00619 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Chloromethane | 74-87-3 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.039 J** | 125 U | 0.121 UJ | 0.528 UJ | **0.015 CD** | 0.011 UJ | 0.012 UJ | **0.028 J** | 0.012 UJ |
| Styrene | 100-42-5 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.02 J** | 62.4 U | **0.086 J** | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00575 UJ | 62.4 U | 0.061 UJ | 0.264 UJ | 0.00551 U | 0.00552 UJ | 0.00595 UJ | 0.00631 UJ | 0.00619 UJ |
| Total VOCs | TVOC | NE | NE | **0.059** | ND | **1.385** | **3.128** | **0.015** | ND | ND | **0.168** | **0.206** |
| **PAHs (mg/kg)** | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.037 U | **66 D** | **1.88** | **79.9** | 0.037 U | 0.036 U | 0.04 U | 0.042 U | **0.916** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.037 U | **105 D** | **0.329** | **31.3** | **0.042** | 0.036 U | 0.04 U | 0.042 U | **0.186** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.037 U | **48.8 D** | **2.32** | **99.2** | **0.065** | **0.029 J** | 0.04 U | 0.042 U | **1.56** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.037 U | **62.1 D** | **2.47** | **24.3** | **0.142** | **0.032 J** | 0.04 U | **0.028 J** | **1.1** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.037 U | **748 D** | **5.45** | **121** | **0.291** | **0.072** | 0.04 U | **0.108** | **6.43** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.037 U | **413 D** | **2.11** | **107** | **0.032 J** | 0.036 U | 0.04 U | 0.042 U | **0.564** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.04** | **3000 D** | **4.79** | **86.7** | 0.037 U | 0.036 U | **0.037 J** | 0.042 U | **0.159** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.12** | **4090 D** | **4.15** | **60.5** | **0.031 J** | 0.036 U | **0.053** | 0.042 U | **0.529** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.037 U | **2590 D** | **6** | **192** | **0.187** | **0.087** | 0.04 U | **0.1** | **3.91** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.037 U | **891 D** | **5.4** | **176** | **0.286** | **0.076** | 0.04 U | **0.104** | **5.45** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.037 U | **188 D** | **3.61** | **85.9** | **0.155** | **0.044** | 0.04 U | **0.054** | **2.84** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.037 U | **23.7 D** | **3.48** | **66.3** | **0.181** | **0.045** | 0.04 U | **0.039 J** | **2.08** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.037 U | **117 D** | **2.98** | **38.1** | **0.187** | **0.031 J** | 0.04 U | **0.037 J** | **1.39** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.037 U | **111 D** | **2.8** | **39.1** | **0.155** | **0.051** | 0.04 U | **0.037 J** | **1.87** |
| Chrysene | 218-01-9 | 110 | 1 | 0.037 U | **291 D** | **3.62** | **69.9** | **0.176** | **0.047** | 0.04 U | **0.061** | **3.38** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.037 U | **24.4 D** | **0.872** | **10.3** | **0.028 J** | 0.036 U | 0.04 U | 0.042 U | **0.325** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.037 U | **60.2 D** | **1.93** | **19.9** | **0.105** | 0.036 U | 0.04 U | **0.026 J** | **0.987** |
| Total PAHs | TPAH | NE | NE | **0.16** | **12829.2** | **54.191** | **1307.4** | **2.063** | **0.514** | **0.09** | **0.594** | **33.676** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB344 | GPEC-SB347 | GPEC-SB347 | GPEC-SB347 | GPEC-SB348 | GPEC-SB348 | GPEC-SB348 | GPEC-SB349 | GPEC-SB349 |
| Sample Name | | | | GPEC-SB344 (79-80) | GPEC-SB347 (1.5-2) | GPEC-SB347 (9-10) | GPEC-SB347 (22-23) | GPEC-SB348 (5-5.5) | GPEC-SB348 (12.5-13) | GPEC-SB348 (29.5-30) | GPEC-SB349 (5) | GPEC-SB349 (15-17) |
| Start Depth | | | | 79 | 1.5 | 9 | 22 | 5 | 12.5 | 29.5 | 5 | 15 |
| End Depth | | | | 80 | 2 | 10 | 23 | 5.5 | 13 | 30 | 5.5 | 17 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 7/23/2015 | 3/18/2015 | 4/1/2015 | 4/1/2015 | 3/19/2015 | 3/30/2015 | 3/30/2015 | 3/21/2016 | 3/23/2016 |
| Parent Sample Code | | | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.037 U | 1.2 U | 0.04 UJ | 1.27 UJ | 0.037 U | 0.036 UJ | 0.04 UJ | 0.042 U | 0.083 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | **0.614** | **0.275** | 0.04 U | 0.042 U | 0.083 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Carbazole | 86-74-8 | NE | NE | 0.037 U | 1.2 U | **0.976** | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | **0.37** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.037 U | **60.1 D** | **1.03** | **2.81** | 0.037 U | 0.036 U | 0.04 U | 0.042 U | **0.313** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.369 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.369 U | 1.2 U | 0.04 UJ | 1.27 UJ | 0.037 U | 0.036 UJ | 0.04 UJ | 0.042 U | 0.083 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.369 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.037 U | 1.2 U | 0.04 U | **2.34** | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | **0.065 J** |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Pyridine | 110-86-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.037 U | 1.2 U | 0.04 U | 1.27 U | 0.037 U | 0.036 U | 0.04 U | 0.042 U | 0.083 U |
| Total SVOCs | TSVOC | NE | NE | **0.16** | **12889.3** | **56.197** | **1312.55** | **2.677** | **0.789** | **0.09** | **0.594** | **34.424** |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.245 U | 0.024 U | 0.104 U | 0.021 U | 0.021 U | 0.024 U | 0.025 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB344 | GPEC-SB347 | GPEC-SB347 | GPEC-SB347 | GPEC-SB348 | GPEC-SB348 | GPEC-SB348 | GPEC-SB349 | GPEC-SB349 |
| | | | | Sample Name | GPEC-SB344 (79-80) | GPEC-SB347 (1.5-2) | GPEC-SB347 (9-10) | GPEC-SB347 (22-23) | GPEC-SB348 (5-5.5) | GPEC-SB348 (12.5-13) | GPEC-SB348 (29.5-30) | GPEC-SB349 (5) | GPEC-SB349 (15-17) |
| | | | | Start Depth | 79 | 1.5 | 9 | 22 | 5 | 12.5 | 29.5 | 5 | 15 |
| | | | | End Depth | 80 | 2 | 10 | 23 | 5.5 | 13 | 30 | 5.5 | 17 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 7/23/2015 | 3/18/2015 | 4/1/2015 | 4/1/2015 | 3/19/2015 | 3/30/2015 | 3/30/2015 | 3/21/2016 | 3/23/2016 |
| | | | | Parent Sample Code | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.025 U | NA | NA | 0.00428 U | ND | ND | 0.00503 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.306 U | NA | NA | 0.054 U | NA | NA | 0.063 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | **33.6 D** | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.025 U | NA | NA | 0.00428 U | NA | NA | 0.00503 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.306 U | NA | NA | 0.054 U | NA | NA | 0.063 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.199 U | NA | NA | 0.018 U | NA | NA | 0.02 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.199 U | NA | NA | 0.018 U | NA | NA | 0.02 U | NA |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3580** | **2540** | **8840** | **6100** | **7970** | **4730** | **3180** | **11000** | **6350** |
| Antimony | 7440-36-0 | NE | NE | 0.601 U | **2.11** | **0.938** | **0.824** | **0.828** | **4.13** | 0.63 U | 0.651 U | **0.879** |
| Arsenic | 7440-38-2 | 16 | 16 | **1.4** | **6.61** | **4.34** | **11.2** | **4.12** | **1.38** | **0.667** | **3.61** | **12.2** |
| Barium | 7440-39-3 | 10000 | 820 | **17.6** | **44.3** | **174** | **75.3** | **71.2** | **40.9** | **16.6** | **95** | **46.7** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.601 U | **0.687** | **1.17** | **0.314 J** | **1.14** | **0.363 J** | 0.63 U | **0.531 J** | **0.301 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.601 U | **0.287 J** | **0.229 J** | 0.708 U | **0.168 J** | 0.578 U | 0.63 U | 0.651 U | **0.21 J** |
| Calcium | 7440-70-2 | NE | NE | **1010** | **873** | **13500** | **10000** | **2120** | **5870** | **1070** | **4970** | **2230** |
| Chromium | 7440-47-3 | NE | NE | **9.66** | **10.9** | **21.2** | **13.3** | **28.9** | **89.9** | **7.45** | **20.6** | **12.3** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.15 U | 1.27 U | 1.21 U | 1.32 U | 1.12 U | 1.1 U | 1.19 U | 1.26 U | 1.24 U |
| Cobalt | 7440-48-4 | NE | NE | **3.24** | **3.39** | **6.1** | **5.85** | **10.3** | **4.45** | **2.8** | **6.03** | **4.31** |
| Copper | 7440-50-8 | 10000 | 1720 | **15** | **86.7** | **50.2** | **63** | **83.6** | **18.2** | **7.11** | **17.8** | **86** |
| Iron | 7439-89-6 | NE | NE | **10400** | **7520** | **17300** | **21200** | **24800** | **13800** | **7450** | **20500** | **14300** |
| Lead | 7439-92-1 | 3900 | 450 | **2.26** | **239** | **152** | **132** | **205** | **472** | **1.95** | **76** | **133** |
| Magnesium | 7439-95-4 | NE | NE | **1740** | **360** | **2570** | **2710** | **2280** | **4410** | **1350** | **2880** | **1340** |
| Manganese | 7439-96-5 | 10000 | 2000 | **129** | **75.2** | **305** | **247** | **442** | **256** | **144** | **422** | **137** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.012 J** | **0.095** | **2.42 J** | **1.5 J** | **0.127** | **0.03** | 0.0065 U | **0.116** | **0.514** |
| Nickel | 7440-02-0 | 10000 | 130 | **6.94** | **13.5** | **17** | **13.9** | **46.4** | **9** | **6.73** | **14.9** | **9.97** |
| Potassium | 7440-09-7 | NE | NE | **474** | **252** | **1010** | **746** | **1200** | **685** | **469** | **1260** | **652** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.916** | **1.18** | **1.24** | **1.64** | **1.78** | **0.938** | 0.63 U | **1.89** | **1.06** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.601 U | **0.173 J** | 0.625 U | 0.708 U | 0.595 U | 0.578 U | 0.63 U | 0.651 U | 0.651 U |
| Sodium | 7440-23-5 | NE | NE | **190** | **109** | **337** | **378** | **107** | **225** | **227** | **104** | **112** |
| Thallium | 7440-28-0 | NE | NE | **0.193 J** | **0.183 J** | 0.625 U | 0.708 U | **0.155 J** | **0.364 J** | **0.191 J** | 0.651 U | 0.651 U |
| Vanadium | 7440-62-2 | NE | NE | **14.7** | **9.11** | **22.8** | **22.3** | **36.3** | **21.7** | **14.6** | **32.4** | **17.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **17** | **165** | **128** | **84.9** | **235** | **26.2** | **12.7** | **64.5** | **74.6** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3.1 U | 3 U | 3.3 U | 2.8 U | 2.8 U | 3 U | 3.2 U | 3.1 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **622 J** | **296000** | **12600** | **56800** | **4770** | **2410** | 1000 U | **2280** | **30300** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| | | | | Location Name | GPEC-SB349 | GPEC-SB350 | GPEC-SB350 | GPEC-SB350 | GPEC-SB351 | GPEC-SB351 | GPEC-SB351 | GPEC-SB352 | GPEC-SB352 |
| | | | | Sample Name | GPEC-SB349 (28-30) | GPEC-SB350 (5) | GPEC-SB350 (12-13) | GPEC-SB350 (18-20) | GPEC-SB351 (5) | GPEC-SB351 (12-15) | GPEC-SB351 (22-25) | GPEC-SB352 (5) | GPEC-SB352 (18-20) | GPEC-SB352 (23-25) |
| | | | | Start Depth | 28 | 5 | 12 | 18 | 5 | 12 | 22 | 5 | 18 | 23 |
| | | | | End Depth | 30 | 5.5 | 13 | 20 | 5.5 | 15 | 25 | 5.5 | 20 | 25 |
| | | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | | Sample Date | 3/23/2016 | 3/21/2016 | 3/23/2016 | 3/23/2016 | 3/22/2016 | 3/24/2016 | 3/24/2016 | 3/22/2016 | 3/24/2016 | 3/24/2016 |
| | | | | Parent Sample Code | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.06 | | 0.00583 UJ | 0.00589 U | 6.13 U | **0.538 D** | **0.072 J** | **5.12 D** | **3.87 D** | 0.00674 U | 0.00625 U | **0.00202 DJ** |
| Toluene | 108-88-3 | 1000 | 0.7 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | **0.124 J** | **2.69 D** | **2.85 D** | 0.00674 U | 0.00625 U | 0.00608 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | | 0.00583 UJ | 0.00589 U | **45.2 D** | **1.71 D** | **0.147** | **108 D** | **50.2 D** | **0.00324 DJ** | 0.00625 U | **0.00879 D** |
| m,p-Xylene | 108383/106423 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | | 0.012 UJ | 0.012 U | **9.43 DJ** | **0.635 D** | **0.565** | **93.5 D** | **49.1 D** | 0.014 U | 0.013 U | **0.00844 DJ** |
| Total BTEX | TBTEX | NE | NE | | ND | ND | **54.63** | **2.883** | **0.908** | **209.31** | **106.02** | **0.00324** | ND | **0.01925** |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | | 0.029 UJ | **0.075 D** | 12.3 U | 0.473 U | 0.262 U | 2.43 U | 1.36 U | **0.621 D** | 0.031 U | **0.117 D** |
| Acrolein (propenal) | 107-02-8 | NE | NE | | 0.117 UJ | 0.118 U | 123 U | 4.73 U | 2.62 U | 24.3 U | 13.6 U | 0.135 U | 0.125 U | 0.122 U |
| Acrylonitrile | 107-13-1 | NE | NE | | 0.117 UJ | 0.118 U | 123 U | 4.73 U | 2.62 U | 24.3 U | 13.6 U | 0.135 U | 0.125 U | 0.122 U |
| Bromodichloromethane | 75-27-4 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Bromoform | 75-25-2 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Bromomethane | 74-83-9 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | | 0.00583 UJ | **0.00879 D** | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | **0.033 D** | 0.00625 U | **0.011 D** |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | | 0.012 UJ | 0.012 U | 12.3 U | 0.473 U | 0.262 U | 2.43 U | 1.36 U | 0.014 U | 0.013 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | | 0.00583 UJ | **0.00487 DJ** | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | **0.039 D** | **0.011 D** | **0.00772 D** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | | 0.012 UJ | 0.012 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.014 U | 0.013 U | 0.012 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Chloroethane | 75-00-3 | NE | 1.9 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Chloroform | 67-66-3 | 700 | 0.37 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Chloromethane | 74-87-3 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Dibromochloromethane | 124-48-1 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Diisopropyl ether | 108-20-3 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 2-Hexanone | 591-78-6 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | | 0.012 UJ | 0.012 U | 12.3 U | 0.473 U | 0.262 U | 2.43 U | 1.36 U | **0.043 CD** | 0.013 U | **0.036 CD** |
| Styrene | 100-42-5 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Vinyl acetate | 108-05-4 | NE | NE | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | | 0.00583 UJ | 0.00589 U | 6.13 U | 0.236 U | 0.131 U | 1.22 U | 0.679 U | 0.00674 U | 0.00625 U | 0.00608 U |
| Total VOCs | TVOC | NE | NE | | ND | **0.08866** | **54.63** | **2.883** | **0.908** | **209.31** | **106.02** | **0.73924** | **0.011** | **0.19097** |
| **PAHs (mg/kg)** | | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | | 0.038 U | **0.226** | **2.14 D** | **0.948 D** | **8.3 D** | **36.6 D** | **4.79** | **0.531** | **0.253** | 0.041 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | | 0.038 U | **0.072** | **0.259 D** | 0.191 U | **0.96 D** | **4.33 D** | **0.914** | **0.102** | **0.11** | **0.039 J** |
| Anthracene | 120-12-7 | 1000 | 1000 | | 0.038 U | **0.395** | **1.27 D** | **0.691 D** | **11 D** | **23.7 D** | **3.29** | **0.503** | **0.235** | **0.104** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | | 0.038 U | **0.585** | **0.316 D** | **0.224 D** | **5.57 D** | **4.38 D** | **0.743** | **0.215** | **0.167** | **0.099** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | | 0.038 U | **2.55** | **2.58 D** | **1.58 D** | **39.4 D** | **30.8 D** | **5.15** | **1.02** | **0.598** | **0.412** |
| Fluorene | 86-73-7 | 1000 | 386 | | 0.038 U | **0.25** | **2.43 D** | **1.13 D** | **8.66 D** | **38.2 D** | **5.11** | **0.989** | **0.286** | **0.045** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | | 0.038 U | **0.254** | **12.3 D** | **5.94 D** | **3.5 D** | **134 D** | **19.2 D** | **0.617** | **0.834** | 0.041 U |
| Naphthalene | 91-20-3 | 1000 | 12 | | 0.038 U | **0.697** | **32.3 D** | **20.5 D** | **4.56 D** | **254 D** | **38 D** | **0.372** | **0.42** | **0.055** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | | 0.038 U | **2.08** | **8.13 D** | **3.97 D** | **49.3 D** | **98.6 D** | **14.1 D** | **0.586** | **1.23** | **0.369** |
| Pyrene | 129-00-0 | 1000 | 1000 | | 0.038 U | **2.01** | **3.4 D** | **1.71 D** | **28.8 D** | **42.9 D** | **5.59** | **0.944** | **0.755** | **0.483** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | | 0.038 U | **0.984** | **1.4 D** | **0.712 D** | **14.8 D** | **17.3 D** | **2.55** | **0.456** | **0.382** | **0.338** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | | 0.038 U | **0.842** | **0.86 D** | **0.527 D** | **10.7 D** | **10.7 D** | **1.71** | **0.311** | **0.282** | **0.199** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | | 0.038 U | **0.64** | **0.446 D** | **0.261 D** | **8.28 D** | **5.48 D** | **0.863** | **0.3** | **0.203** | **0.153** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | | 0.038 U | **0.748** | **0.593 D** | **0.425 D** | **9.29 D** | **6.41 D** | **1.15** | **0.254** | **0.194** | **0.154** |
| Chrysene | 218-01-9 | 110 | 1 | | 0.038 U | **1.18** | **1.58 D** | **0.84 D** | **15.2 D** | **18.2 D** | **2.79** | **0.584** | **0.434** | **0.382** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | | 0.038 U | **0.171** | 0.204 U | 0.191 U | **2.38 D** | **1.44 D** | **0.26** | **0.072** | **0.05** | **0.029 J** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | | 0.038 U | **0.496** | **0.28 D** | **0.194 D** | **5.43 D** | **3.77 D** | **0.632** | **0.199** | **0.131** | **0.076** |
| Total PAHs | TPAH | NE | NE | | ND | **14.18** | **70.284** | **39.652** | **226.13** | **730.81** | **106.842** | **8.055** | **6.564** | **2.937** |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| Investigation Phase | | | | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
| Location Name | | | | GPEC-SB349 | GPEC-SB350 | GPEC-SB350 | GPEC-SB350 | GPEC-SB351 | GPEC-SB351 | GPEC-SB351 | GPEC-SB352 | GPEC-SB352 | GPEC-SB352 |
| Sample Name | | | | GPEC-SB349 (28-30) | GPEC-SB350 (5) | GPEC-SB350 (12-13) | GPEC-SB350 (18-20) | GPEC-SB351 (5) | GPEC-SB351 (12-15) | GPEC-SB351 (22-25) | GPEC-SB352 (5) | GPEC-SB352 (18-20) | GPEC-SB352 (23-25) |
| Start Depth | | | | 28 | 5 | 12 | 18 | 5 | 12 | 22 | 5 | 18 | 23 |
| End Depth | | | | 30 | 5.5 | 13 | 20 | 5.5 | 15 | 25 | 5.5 | 20 | 25 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 3/23/2016 | 3/21/2016 | 3/23/2016 | 3/23/2016 | 3/22/2016 | 3/24/2016 | 3/24/2016 | 3/22/2016 | 3/24/2016 | 3/24/2016 |
| Parent Sample Code | | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 R | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | **0.129** | 0.204 U | 0.191 U | **4.67 D** | 0.4 U | **0.189** | 0.045 U | 0.039 U | 0.041 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | **0.124** | **0.339 D** | **0.198 D** | **6.28 D** | **5.35 D** | **0.807** | **0.264** | **0.111** | 0.041 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | **0.331 DJ** | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.038 U | 0.204 U | 0.191 U | 0.423 U | 0.4 U | 0.045 U | 0.045 U | 0.039 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | ND | **14.433** | **70.623** | **39.85** | **237.411** | **736.16** | **107.838** | **8.319** | **6.675** | **2.937** |
| **PCBs (mg/kg)** | | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.023 U | 0.024 U | 0.024 U | 0.025 U | 0.024 U | 0.027 U | 0.026 U | 0.025 U | 0.024 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

**Table 11. Subsurface Soil Analytical Results - Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| **Investigation Phase** | | | | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** | **Phase 2** |
| **Location Name** | | | | **GPEC-SB349** | **GPEC-SB350** | **GPEC-SB350** | **GPEC-SB350** | **GPEC-SB351** | **GPEC-SB351** | **GPEC-SB351** | **GPEC-SB352** | **GPEC-SB352** | **GPEC-SB352** |
| **Sample Name** | | | | **GPEC-SB349 (28-30)** | **GPEC-SB350 (5)** | **GPEC-SB350 (12-13)** | **GPEC-SB350 (18-20)** | **GPEC-SB351 (5)** | **GPEC-SB351 (12-15)** | **GPEC-SB351 (22-25)** | **GPEC-SB352 (5)** | **GPEC-SB352 (18-20)** | **GPEC-SB352 (23-25)** |
| **Start Depth** | | | | **28** | **5** | **12** | **18** | **5** | **12** | **22** | **5** | **18** | **23** |
| **End Depth** | | | | **30** | **5.5** | **13** | **20** | **5.5** | **15** | **25** | **5.5** | **20** | **25** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **3/23/2016** | **3/21/2016** | **3/23/2016** | **3/23/2016** | **3/22/2016** | **3/24/2016** | **3/24/2016** | **3/22/2016** | **3/24/2016** | **3/24/2016** |
| Parent Sample Code | | | | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | | | | |
| **Pesticides (mg/kg)** | | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.057 U | NA | NA | 0.061 U | NA | NA | 0.065 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00454 U | NA | NA | 0.00491 U | NA | NA | 0.0052 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.057 U | NA | NA | 0.061 U | NA | NA | 0.065 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.019 U | NA | NA | 0.022 U | NA | NA | 0.022 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.019 U | NA | NA | 0.022 U | NA | NA | 0.022 U | NA | NA |
| | | | | | | | | | | | | | |
| **Metals (mg/kg)** | | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5860** | **10000** | **12000** | **10100** | **9240** | **9340** | **7720** | **12600** | **9730** | **9120** |
| Antimony | 7440-36-0 | NE | NE | 0.585 U | **1.22** | **0.478 J** | **0.603 J** | **0.517 J** | **0.861** | **0.432 J** | **2.58** | **2.07** | **0.955** |
| Arsenic | 7440-38-2 | 16 | 16 | **1.14** | **7.22** | **19.2** | **6.72** | **4.32** | **8.51** | **4.78** | **12.2** | **6.61** | **5.63** |
| Barium | 7440-39-3 | 10000 | 820 | **25.8** | **112** | **76** | **99.8** | **82** | **68.3** | **71.2** | **129** | **86.4** | **52.2** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.28 J** | **0.539 J** | **0.518 J** | **0.453 J** | **0.364 J** | **0.466 J** | **0.358 J** | **0.609 J** | **0.468 J** | **0.386 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.585 U | **0.382 J** | 0.646 U | **0.176 J** | 0.697 U | 0.652 U | 0.72 U | **0.41 J** | 0.659 U | 0.641 U |
| Calcium | 7440-70-2 | NE | NE | **1610** | **6110** | **4240** | **9610** | **1630** | **6240** | **3690** | **8410** | **7300** | **5330** |
| Chromium | 7440-47-3 | NE | NE | **12.3** | **30.9** | **19.3** | **23.2** | **20.4** | **18.1** | **16.8** | **24.5** | **21.9** | **15.2** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.17 U | 1.18 U | 1.23 U | 1.18 U | 1.31 U | 1.22 U | 1.36 U | 1.35 U | 1.25 U | 1.22 U |
| Cobalt | 7440-48-4 | NE | NE | **3.68** | **6.94** | **6.34** | **5.29** | **3.23** | **6.64** | **5.42** | **6.97** | **6.92** | **6.23** |
| Copper | 7440-50-8 | 10000 | 1720 | **14.2** | **58.7** | **26.1** | **110** | **109** | **38.8** | **35.8** | **132** | **161** | **49.8** |
| Iron | 7439-89-6 | NE | NE | **11100** | **33200** | **22900** | **22400** | **13000** | **36500** | **19100** | **30700** | **37100** | **25400** |
| Lead | 7439-92-1 | 3900 | 450 | **3.05** | **295** | **142** | **302** | **197** | **125** | **116** | **145** | **530** | **28.9** |
| Magnesium | 7439-95-4 | NE | NE | **2080** | **2270** | **2730** | **2630** | **1180** | **1970** | **2040** | **2800** | **3180** | **2320** |
| Manganese | 7439-96-5 | 10000 | 2000 | **157** | **686** | **244** | **377** | **442** | **496** | **281** | **339** | **355** | **344** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.0073 U | **2** | **0.754** | **0.359** | **2.13** | **2.2** | **0.48** | **0.256** | **0.161** | **0.109** |
| Nickel | 7440-02-0 | 10000 | 130 | **9.03** | **15.9** | **15.9** | **14.1** | **9.71** | **14.8** | **13.7** | **20.4** | **16** | **13.2** |
| Potassium | 7440-09-7 | NE | NE | **872** | **1150** | **1200** | **1040** | **963** | **1010** | **1200** | **2130** | **1220** | **842** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.774** | **1.85** | **1.8** | **1.65** | **1.64** | **1.6** | **1.08** | **1.63** | **1.01** | **0.998** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.585 U | 0.639 U | 0.646 U | 0.63 U | **0.228 J** | 0.652 U | 0.72 U | 0.731 U | **0.248 J** | 0.641 U |
| Sodium | 7440-23-5 | NE | NE | **166** | **205** | **114** | **185** | **92.6** | **112** | **113** | **290** | **274** | **440** |
| Thallium | 7440-28-0 | NE | NE | 0.585 U | 0.639 U | 0.646 U | 0.63 U | 0.697 U | 0.652 U | 0.72 U | 0.731 U | 0.659 U | 0.641 U |
| Vanadium | 7440-62-2 | NE | NE | **19.6** | **30.7** | **29.2** | **29.5** | **18.1** | **29.8** | **27.5** | **31.8** | **32.7** | **25.8** |
| Zinc | 7440-66-6 | 10000 | 2480 | **15.9** | **196** | **81.4** | **143** | **71.5** | **75.4** | **83.7** | **229** | **101** | **36.9** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.9 U | 3.1 U | 3 U | 3.3 U | 3 U | 3.4 U | 3.4 U | 3.1 U | 3 U |
| Total Cyanide | 57-12-5 | 10000 | 40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Other (%)** | | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **9720** | **3000** | **3780** | **35100** | **17700** | **2430** | **32900** | **5580** | **3980** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 3 | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 3 |
| | | | Location Name | GPEC-SB201/MW201 | GPEC-SB201/MW201 | GPEC-SB219 | GPEC-SB219 | GPEC-SB219 | GPEC-TP501 |
| | | | Sample Name | GPEC-SB201 (22-23) | GPEC-SB201 (74-75) | GPEC-SB219 (6-7) | GPEC-SB219 (50-51) | GPEC-SB219 (129-130) | GPEC-TP501 (7-8) |
| | | | Start Depth | 22 | 74 | 6 | 50 | 129 | 7 |
| | | | End Depth | 23 | 75 | 7 | 51 | 130 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/13/2011 | 11/13/2011 | 6/25/2012 | 6/28/2012 | 6/28/2012 | 7/31/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.0093 J** | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | **0.0021 DJ** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0067 UJ | 0.003 UJ | 0.011 U | 0.013 U | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **0.0093** | ND | ND | ND | ND | **0.0021** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.38 J** | **0.032 J** | 0.027 U | 0.032 U | 0.029 U | 0.059 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | 0.117 U |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | 0.117 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Bromoform | 75-25-2 | NE | NE | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.025 J** | 0.01 UJ | 0.027 U | 0.032 U | 0.029 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | 0.024 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.09 J** | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0022 UJ | 0.001 U | 0.011 U | 0.013 U | 0.012 U | 0.00587 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | 0.00587 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | 0.00587 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.022 UJ | 0.01 UJ | 0.011 U | 0.013 U | 0.012 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | 0.00587 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.022 UJ | 0.01 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.081 J** | **0.029 J** | 0.011 U | 0.013 U | 0.012 U | **0.042 CD** |
| Styrene | 100-42-5 | NE | NE | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | 0.00587 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | 0.00587 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0022 UJ | 0.001 UJ | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | 0.00587 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | 0.00587 U |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | 0.00587 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0022 UJ | 0.001 U | 0.00532 U | 0.00633 U | 0.00581 U | 0.00587 U |
| Total VOCs | TVOC | NE | NE | **0.5853** | **0.061** | ND | ND | ND | **0.0441** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.208** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.371** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.678** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **1.21** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **2.14** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.643** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.74 UJ | 0.39 U | 0.035 U | **0.052** | **0.105** | **0.108** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.74 UJ | 0.39 U | **0.046** | **0.177** | **0.263** | **0.073** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **3.26** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **3.23** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **1.16** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **1.15** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **0.973** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **0.972** |
| Chrysene | 218-01-9 | 110 | 1 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **1.39** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **0.224** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | **0.785** |
| Total PAHs | TPAH | NE | NE | ND | ND | **0.046** | **0.229** | **0.368** | **18.575** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 3 | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 3 |
| | | | Location Name | GPEC-SB201/MW201 | GPEC-SB201/MW201 | GPEC-SB219 | GPEC-SB219 | GPEC-SB219 | GPEC-TP501 |
| | | | Sample Name | GPEC-SB201 (22-23) | GPEC-SB201 (74-75) | GPEC-SB219 (6-7) | GPEC-SB219 (50-51) | GPEC-SB219 (129-130) | GPEC-TP501 (7-8) |
| | | | Start Depth | 22 | 74 | 6 | 50 | 129 | 7 |
| | | | End Depth | 23 | 75 | 7 | 51 | 130 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/13/2011 | 11/13/2011 | 6/25/2012 | 6/28/2012 | 6/28/2012 | 7/31/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | 0.039 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | 0.039 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | 0.039 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | NA | NA | 0.039 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.074 UJ | 0.039 UJ | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.089** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Carbazole | 86-74-8 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | **0.104** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 1.5 UJ | 0.79 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2.2 UJ | 1.2 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2.2 UJ | R | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.15 UJ | 0.079 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.15 UJ | 0.079 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | 0.039 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.15 UJ | 0.079 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.74 UJ | 0.39 UJ | R | R | R | 0.039 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Isophorone | 78-59-1 | NE | 4.4 | **0.22 J** | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.5 UJ | 0.79 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.5 UJ | 0.79 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.5 UJ | 0.79 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2.2 UJ | 1.2 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | 0.039 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.074 UJ | 0.039 U | NA | NA | NA | 0.039 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2.2 UJ | 1.2 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Phenol | 108-95-2 | 1000 | 0.33 | **0.7 J** | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | 0.039 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.074 UJ | 0.039 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.74 UJ | 0.39 U | 0.035 U | 0.042 U | 0.039 U | 0.039 U |
| Total SVOCs | TSVOC | NE | NE | **0.92** | ND | **0.046** | **0.229** | **0.368** | **18.768** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 3 | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 1 | Phase 3 |
| | | | Location Name | GPEC-SB201/MW201 | GPEC-SB201/MW201 | GPEC-SB219 | GPEC-SB219 | GPEC-SB219 | GPEC-TP501 |
| | | | Sample Name | GPEC-SB201 (22-23) | GPEC-SB201 (74-75) | GPEC-SB219 (6-7) | GPEC-SB219 (50-51) | GPEC-SB219 (129-130) | GPEC-TP501 (7-8) |
| | | | Start Depth | 22 | 74 | 6 | 50 | 129 | 7 |
| | | | End Depth | 23 | 75 | 7 | 51 | 130 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/13/2011 | 11/13/2011 | 6/25/2012 | 6/28/2012 | 6/28/2012 | 7/31/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | 0.114 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.15 UJ | 0.079 U | 0.021 U | 0.024 U | 0.023 U | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.052 U | NA | NA | 0.057 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00417 U | NA | NA | 0.00455 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.052 U | NA | NA | 0.057 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | 0.019 U |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.05 U | NA | NA | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **13800 J** | **4280** | **6010** | **2800** | **3560** | **9290** |
| Antimony | 7440-36-0 | NE | NE | 4.4 UJ | 2.3 U | 1.12 U | 1.33 U | 1.21 U | **1.25** |
| Arsenic | 7440-38-2 | 16 | 16 | **3 J** | 1.2 UJ | **1.15** | **0.56 J** | 0.604 U | **6.01** |
| Barium | 7440-39-3 | 10000 | 820 | **28.9 J** | **36.8 J** | **25.6** | **15.5** | **25** | **67.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.67 J** | **0.21 J** | **0.364 J** | 0.667 U | **0.361 J** | **0.471 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 2.2 UJ | 1.2 U | 0.559 U | 0.667 U | 0.604 U | 0.609 U |
| Calcium | 7440-70-2 | NE | NE | **2160 J** | **10700** | **863** | **1060** | **2620** | **960** |
| Chromium | 7440-47-3 | NE | NE | **29.2 J** | **11.2** | **9.97** | **5.08** | **12.8** | **22** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 4.4 U | 2.4 U | 1.06 U | 1.27 U | 1.16 U | 1.17 U |
| Cobalt | 7440-48-4 | NE | NE | **10.8 J** | **4.3 J** | **4.49** | **2.25 J** | **1.36 J** | **5.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **24.6 J** | **11** | **11.7** | **5.83** | **10.3** | **108** |
| Iron | 7439-89-6 | NE | NE | **29700 J** | **10900** | **10500** | **5240** | **53000** | **34400** |
| Lead | 7439-92-1 | 3900 | 450 | **19.9 J** | **3.2** | **6.66** | **1.65** | **9.19** | **79.4** |
| Magnesium | 7439-95-4 | NE | NE | **7200 J** | **6930** | **2160** | **1260** | **2070** | **2000** |
| Manganese | 7439-96-5 | 10000 | 2000 | **306 J** | **228 J** | **254** | **134** | **545** | **232** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.073 UJ | 0.039 U | **0.014** | 0.015 U | 0.014 U | **0.427** |
| Nickel | 7440-02-0 | 10000 | 130 | **25.9 J** | **12.5** | **10.4** | **4.77** | **3.82** | **15.2** |
| Potassium | 7440-09-7 | NE | NE | **3120 J** | **1190** | **697** | **423** | **815** | **775** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.4 UJ | **0.65 J** | 2.24 U | 2.67 U | 2.42 U | **0.993** |
| Silver | 7440-22-4 | 6800 | 8.3 | 4.4 UJ | 2.3 U | 0.559 U | 0.667 U | 0.604 U | 0.609 U |
| Sodium | 7440-23-5 | NE | NE | **8000 J** | **311 J** | **42.8 J** | **93 J** | **65.5 J** | **55 J** |
| Thallium | 7440-28-0 | NE | NE | 4.4 UJ | 2.3 U | 0.559 U | 0.667 U | 0.604 U | 0.609 U |
| Vanadium | 7440-62-2 | NE | NE | **51.4 J** | **16.3** | **13.4** | **7.21** | **20.5** | **29.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **80.8 J** | **21.6** | **45.8** | **9.96** | **19.1** | **78.9** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 4.9 UJ | 2.5 U | 1.06 U | 1.27 U | 1.16 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | **55.3** | **15.3** | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **44.7** | **84.7** | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **92400** | **2490** | **1740** | **1960** | **17500** | **15600** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP502 | GPEC-TP503 | GPEC-TP504 | GPEC-TP505 | GPEC-TP506 | GPEC-TP507 | GPEC-TP508 |
| | | | Sample Name | GPEC-TP502 (3-4) | GPEC-TP503 (9.5-10) | GPEC-TP504 (7-8) | GPEC-TP505 (9-10) | GPEC-TP506 (8-9) | GPEC-TP507 (7-8) | GPEC-TP508 (3-4) |
| | | | Start Depth | 3 | 9.5 | 7 | 9 | 8 | 7 | 3 |
| | | | End Depth | 4 | 10 | 8 | 10 | 9 | 8 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/1/2017 | 7/28/2017 | 7/27/2017 | 7/26/2017 | 7/13/2017 | 7/20/2017 | 7/18/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.006 U | 0.00541 U | **0.411 D** | **0.017 D** | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.006 U | 0.00541 U | **0.316 D** | **0.07 D** | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.0062 D** | 0.00541 U | **11.5 D** | **0.039 D** | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.011 U | **14.7 D** | **0.049 D** | 0.013 U | 0.012 UJ | 0.011 UJ |
| Total BTEX | TBTEX | NE | NE | **0.0062** | ND | **26.927** | **0.175** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.06 U | 0.054 U | 1.17 U | 0.059 U | 0.066 U | 0.058 UJ | **0.031 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.12 U | 0.108 U | 5.86 U | 0.118 U | 0.133 U | 0.115 R | 0.112 R |
| Acrylonitrile | 107-13-1 | NE | NE | 0.12 U | 0.108 U | 5.86 U | 0.118 U | 0.133 U | 0.115 UJ | 0.112 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Bromoform | 75-25-2 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Bromomethane | 74-83-9 | NE | NE | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.011 U | 1.17 U | 0.012 U | 0.013 U | 0.012 UJ | 0.011 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.022 U | 1.17 U | 0.024 U | 0.027 U | 0.023 R | 0.023 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.00612 D** | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | **0.00499 J** | 0.00562 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.011 U | 1.17 U | 0.012 U | 0.027 U | 0.023 R | 0.023 R |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Chloromethane | 74-87-3 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.011 U | 1.17 U | 0.012 U | 0.013 U | 0.012 UJ | 0.011 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.011 U | 1.17 U | 0.012 U | 0.013 U | 0.012 UJ | 0.011 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.043 CD** | **0.043 CD** | 0.586 U | **0.02 CD** | **0.018 CD** | 0.012 UJ | 0.011 UJ |
| Styrene | 100-42-5 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.006 U | 0.00541 U | 0.293 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.006 U | 0.00541 U | 0.586 U | 0.0059 U | 0.00663 U | 0.00577 UJ | 0.00562 UJ |
| Total VOCs | TVOC | NE | NE | **0.05532** | **0.043** | **26.927** | **0.195** | **0.018** | **0.00499** | **0.031** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.103** | 0.036 U | **0.052** | 0.039 U | **0.178** | **0.119** | **0.095** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.861** | 0.036 U | **0.121** | 0.039 U | 0.043 U | 0.037 U | **0.056** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.124** | 0.036 U | **0.219** | 0.039 U | **0.415** | **0.292** | **0.22** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.523** | 0.036 U | **0.589** | 0.039 U | **0.466** | **0.81** | **0.438** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.711** | 0.036 U | **1.34** | **0.044** | **1.39** | **1.48** | **1.35** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.143** | 0.036 U | **0.129** | 0.039 U | **0.161** | **0.146** | **0.124** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.074** | 0.036 U | **0.154** | 0.039 U | **0.078** | **0.039** | **0.044** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.202** | 0.036 U | **0.125** | 0.039 U | **0.07** | **0.085** | **0.069** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.494** | 0.036 U | **0.861** | 0.039 U | **1.26** | **0.758** | **0.958** |
| Pyrene | 129-00-0 | 1000 | 1000 | **1.02** | 0.036 U | **2.39** | **0.073** | **1.32** | **2.23** | **1.14** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.473** | 0.036 U | **0.925** | **0.065** | **0.793** | **1.15** | **0.684** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.368** | 0.036 U | **0.744** | **0.05** | **0.69** | **1.15** | **0.618** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.538** | 0.036 U | **0.687** | **0.041** | **0.587** | **0.998** | **0.62** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.529** | 0.036 U | **0.689** | **0.051** | **0.6** | **0.76** | **0.474** |
| Chrysene | 218-01-9 | 110 | 1 | **0.703** | 0.036 U | **1.08** | **0.044** | **1** | **1.13** | **0.7** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.123** | 0.036 U | **0.193** | 0.039 U | **0.182** | **0.267** | **0.119** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.39** | 0.036 U | **0.445** | 0.039 U | **0.408** | **0.633** | **0.372** |
| Total PAHs | TPAH | NE | NE | **7.379** | ND | **10.743** | **0.368** | **9.598** | **12.047** | **8.081** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP502 | GPEC-TP503 | GPEC-TP504 | GPEC-TP505 | GPEC-TP506 | GPEC-TP507 | GPEC-TP508 |
| | | | Sample Name | GPEC-TP502 (3-4) | GPEC-TP503 (9.5-10) | GPEC-TP504 (7-8) | GPEC-TP505 (9-10) | GPEC-TP506 (8-9) | GPEC-TP507 (7-8) | GPEC-TP508 (3-4) |
| | | | Start Depth | 3 | 9.5 | 7 | 9 | 8 | 7 | 3 |
| | | | End Depth | 4 | 10 | 8 | 10 | 9 | 8 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/1/2017 | 7/28/2017 | 7/27/2017 | 7/26/2017 | 7/13/2017 | 7/20/2017 | 7/18/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 UJ | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 UJ | 0.037 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.044** | 0.036 U | 0.039 U | **0.131** | 0.043 U | 0.037 U | 0.037 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | **0.109** | **0.073** | **0.094** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.034 J** | 0.036 U | 0.039 U | 0.039 U | **0.104** | **0.117** | **0.075** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | **0.275** | 0.037 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 UJ | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 UJ | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.036 U | 0.039 U | 0.039 U | 0.043 U | 0.037 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | **7.457** | ND | **10.743** | **0.499** | **10.086** | **12.237** | **8.25** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP502 | GPEC-TP503 | GPEC-TP504 | GPEC-TP505 | GPEC-TP506 | GPEC-TP507 | GPEC-TP508 |
| | | | Sample Name | GPEC-TP502 (3-4) | GPEC-TP503 (9.5-10) | GPEC-TP504 (7-8) | GPEC-TP505 (9-10) | GPEC-TP506 (8-9) | GPEC-TP507 (7-8) | GPEC-TP508 (3-4) |
| | | | Start Depth | 3 | 9.5 | 7 | 9 | 8 | 7 | 3 |
| | | | End Depth | 4 | 10 | 8 | 10 | 9 | 8 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/1/2017 | 7/28/2017 | 7/27/2017 | 7/26/2017 | 7/13/2017 | 7/20/2017 | 7/18/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.111 U | 0.021 U | 0.112 U | **0.085** | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.111 U | 0.021 U | 0.112 U | 0.023 U | 0.132 U | 0.108 U | 0.107 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | **0.085** | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.056 U | 0.052 U | 0.056 U | 0.058 U | 0.066 U | 0.054 U | 0.054 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | **0.00678** |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00444 U | 0.00418 U | 0.00449 U | 0.00466 U | 0.00527 U | 0.0043 U | 0.00428 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.056 U | 0.052 U | 0.056 U | 0.058 U | 0.066 U | 0.054 U | 0.054 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.017 U | 0.019 U | 0.019 U | 0.022 U | 0.019 U | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.017 U | 0.019 U | 0.019 U | 0.022 U | 0.019 U | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.02 U | 0.017 U | 0.019 U | 0.019 U | 0.022 U | 0.019 U | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6880** | **6880** | **9890** | **10300** | **7570** | **10500** | **9310** |
| Antimony | 7440-36-0 | NE | NE | **3.2** | 0.558 U | **2.65** | 0.59 U | **2.04** | **2.15** | **7.39** |
| Arsenic | 7440-38-2 | 16 | 16 | **9.87** | **2.22** | **14** | **1.55** | **14.6** | **11.2** | **7.91** |
| Barium | 7440-39-3 | 10000 | 820 | **60.7** | **47.7** | **52.4** | **47** | **148** | **193** | **95.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.622 U | **0.399 J** | **0.439 J** | **0.522 J** | **0.812** | **0.475 J** | **0.483 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.622 U | 0.558 U | 0.622 U | 0.59 U | 0.704 U | **0.454 J** | **0.378 J** |
| Calcium | 7440-70-2 | NE | NE | **1300** | **1510** | **1340** | **1130** | **5820** | **3570** | **3460** |
| Chromium | 7440-47-3 | NE | NE | **16.3** | **21** | **34.4** | **31.2** | **17** | **21.5** | **20.8** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.2 U | 1.08 U | 1.17 U | 1.18 U | 1.33 U | 1.15 U | 1.12 U |
| Cobalt | 7440-48-4 | NE | NE | **3.73** | **7.33** | **6.83** | **8.32** | **10.2** | **6.73** | **7.49** |
| Copper | 7440-50-8 | 10000 | 1720 | **90.5** | **18.3** | **118** | **23.1** | **48.1** | **87.3** | **91.1** |
| Iron | 7439-89-6 | NE | NE | **24000** | **43200** | **65800** | **46300** | **53200** | **29500** | **34300** |
| Lead | 7439-92-1 | 3900 | 450 | **94.3** | **4.78** | **99.1** | **5.92** | **234** | **592** | **241** |
| Magnesium | 7439-95-4 | NE | NE | **1540** | **2360** | **2160** | **2600** | **1700** | **2330** | **2150** |
| Manganese | 7439-96-5 | 10000 | 2000 | **123** | **440** | **443** | **293** | **309** | **212** | **245** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.457** | 0.024 U | **1.64** | 0.03 U | **0.436** | **1.01 J** | **0.471** |
| Nickel | 7440-02-0 | 10000 | 130 | **13.5** | **14.2** | **25.1** | **17.1** | **18.4** | **13.1** | **16.1** |
| Potassium | 7440-09-7 | NE | NE | **611** | **936** | **846** | **1210** | **933** | **863** | **991** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.45** | **0.54 J** | **0.669** | 0.59 U | **3.3** | **0.98** | **1.46** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.26 J** | 0.558 U | **0.321 J** | 0.59 U | 0.704 U | **0.256 J** | **0.275 J** |
| Sodium | 7440-23-5 | NE | NE | **84.1** | **126** | **30.3 J** | **19.8 J** | **105** | **67.7** | **54.7 J** |
| Thallium | 7440-28-0 | NE | NE | 0.622 U | 0.558 U | 0.622 U | 0.59 U | **0.501 J** | 0.617 U | **0.241 J** |
| Vanadium | 7440-62-2 | NE | NE | **22** | **33.3** | **50.4** | **42.3** | **27.2** | **29.7** | **31.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **64.1** | **31.6** | **88.8** | **63.6** | **152** | **204** | **158** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 2.7 U | 2.9 U | 2.9 U | 3.3 U | 2.9 U | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **27700** | 1000 U | **15900** | 1000 U | **229000** | **23500** | **10700** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP509 | GPEC-TP510 | GPEC-TP511 | GPEC-TP512 | GPEC-TP513 | GPEC-TP514 |
| | | | Sample Name | GPEC-TP509 (4-5) | GPEC-TP510 (5-6) | GPEC-TP511 (9.5-10) | GPEC-TP512 (9.5-10) | GPEC-TP513 (6-7) | GPEC-TP514 (9.5-10) |
| | | | Start Depth | 4 | 5 | 9.5 | 9.5 | 6 | 9.5 |
| | | | End Depth | 5 | 6 | 10 | 10 | 7 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/19/2017 | 7/12/2017 | 7/14/2017 | 7/25/2017 | 7/17/2017 | 7/12/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 UJ | 0.011 U | 0.011 UJ | 0.011 U | 0.012 UJ | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.061 UJ | 0.056 U | 0.053 UJ | 0.052 U | 0.058 UJ | 0.058 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.123 R | 0.111 U | 0.106 R | 0.105 U | 0.116 R | 0.115 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.123 UJ | 0.111 U | 0.106 UJ | 0.105 U | 0.116 UJ | 0.115 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Bromoform | 75-25-2 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 UJ | 0.011 U | 0.011 UJ | 0.011 U | 0.012 UJ | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.025 R | 0.022 U | 0.021 R | 0.021 U | 0.023 R | 0.023 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.025 R | 0.022 U | 0.021 R | 0.011 U | 0.023 R | 0.023 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 UJ | 0.011 U | 0.011 UJ | 0.011 U | 0.012 UJ | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 UJ | 0.011 U | 0.011 UJ | 0.011 U | 0.012 UJ | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 UJ | **0.016 CD** | 0.011 UJ | **0.016 CD** | 0.012 UJ | **0.016 CD** |
| Styrene | 100-42-5 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00614 UJ | 0.00556 U | 0.00528 UJ | 0.00523 U | 0.00579 UJ | 0.00577 U |
| Total VOCs | TVOC | NE | NE | ND | **0.016** | ND | **0.016** | ND | **0.016** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **1.25** | **0.093** | 0.033 U | 0.035 U | 0.037 U | **0.092** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.571** | **0.208** | 0.033 U | 0.035 U | 0.037 U | **0.045** |
| Anthracene | 120-12-7 | 1000 | 1000 | **2.61** | **0.441** | 0.033 U | 0.035 U | **0.038** | **0.242** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **3.37** | **1.19** | 0.033 U | 0.035 U | **0.28** | **0.512** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **14** | **3.5** | 0.033 U | 0.035 U | **0.436** | **1.35** |
| Fluorene | 86-73-7 | 1000 | 386 | **1.27** | **0.107** | 0.033 U | 0.035 U | 0.037 U | **0.075** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.59** | **0.045** | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **1.38** | **0.068** | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **13.1** | **1.6** | 0.033 U | 0.035 U | **0.195** | **0.892** |
| Pyrene | 129-00-0 | 1000 | 1000 | **11.8** | **2.54** | 0.033 U | 0.035 U | **0.45** | **1.17** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **6** | **1.76** | 0.033 U | 0.035 U | **0.276** | **0.642** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **5.63** | **1.58** | 0.033 U | 0.035 U | **0.285** | **0.674** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **4.67** | **1.51** | 0.033 U | 0.035 U | **0.317** | **0.497** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **4.67** | **1.32** | 0.033 U | 0.035 U | **0.22** | **0.67** |
| Chrysene | 218-01-9 | 110 | 1 | **6.1** | **1.86** | 0.033 U | 0.035 U | **0.313** | **0.716** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.2** | **0.506** | 0.033 U | 0.035 U | **0.085** | **0.153** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **3.04** | **0.963** | 0.033 U | 0.035 U | **0.21** | **0.436** |
| Total PAHs | TPAH | NE | NE | **81.251** | **19.291** | ND | ND | **3.105** | **8.166** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP509 | GPEC-TP510 | GPEC-TP511 | GPEC-TP512 | GPEC-TP513 | GPEC-TP514 |
| | | | Sample Name | GPEC-TP509 (4-5) | GPEC-TP510 (5-6) | GPEC-TP511 (9.5-10) | GPEC-TP512 (9.5-10) | GPEC-TP513 (6-7) | GPEC-TP514 (9.5-10) |
| | | | Start Depth | 4 | 5 | 9.5 | 9.5 | 6 | 9.5 |
| | | | End Depth | 5 | 6 | 10 | 10 | 7 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/19/2017 | 7/12/2017 | 7/14/2017 | 7/25/2017 | 7/17/2017 | 7/12/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.122 U | 0.035 U | 0.033 R | 0.035 U | 0.037 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | **1.23** | **0.097** | 0.033 U | 0.035 U | 0.037 U | **0.064** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **1.13** | **0.06** | 0.033 U | 0.035 U | 0.037 U | **0.04** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.122 U | **0.084** | 0.033 U | 0.035 U | 0.037 U | **0.094** |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.147** | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | **0.122** | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.122 U | 0.035 U | 0.033 U | 0.035 U | 0.037 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **83.88** | **19.532** | ND | ND | **3.105** | **8.364** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP509 | GPEC-TP510 | GPEC-TP511 | GPEC-TP512 | GPEC-TP513 | GPEC-TP514 |
| | | | Sample Name | GPEC-TP509 (4-5) | GPEC-TP510 (5-6) | GPEC-TP511 (9.5-10) | GPEC-TP512 (9.5-10) | GPEC-TP513 (6-7) | GPEC-TP514 (9.5-10) |
| | | | Start Depth | 4 | 5 | 9.5 | 9.5 | 6 | 9.5 |
| | | | End Depth | 5 | 6 | 10 | 10 | 7 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/19/2017 | 7/12/2017 | 7/14/2017 | 7/25/2017 | 7/17/2017 | 7/12/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.118 U | 0.111 U | 0.02 U | 0.021 U | 0.108 U | 0.115 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.06 U | 0.055 U | 0.049 U | 0.052 U | 0.056 U | 0.057 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00477 U | 0.00443 U | 0.00394 U | 0.00412 U | 0.00444 U | 0.00458 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.06 U | 0.055 U | 0.049 U | 0.052 U | 0.056 U | 0.057 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.018 U | 0.017 U | 0.017 U | 0.019 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.018 U | 0.017 U | 0.017 U | 0.019 U | 0.019 U |
| Silvex | 93-72-1 | 1000 | | 0.02 U | 0.018 U | 0.017 U | 0.017 U | 0.019 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6300** | **7270** | **4580** | **4480** | **7200** | **7940** |
| Antimony | 7440-36-0 | NE | NE | **13.8** | **26.3** | 0.53 U | 0.563 U | **1.54** | **1.38** |
| Arsenic | 7440-38-2 | 16 | 16 | **75.8** | **56** | **1.07** | **0.616** | **7.62** | **7.48** |
| Barium | 7440-39-3 | 10000 | 820 | **2010** | **283** | **28.1** | **25** | **112** | **120** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.508 J** | **0.4 J** | 0.53 U | **0.302 J** | **0.455 J** | **0.521 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **2.99** | **0.965** | 0.53 U | 0.563 U | **0.633** | **0.648** |
| Calcium | 7440-70-2 | NE | NE | **6060** | **5000** | **1030** | **651** | **2590** | **3040** |
| Chromium | 7440-47-3 | NE | NE | **155** | **74.3** | **11.3** | **10.2** | **22.7** | **21.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **1.51** | **0.98 J** | 1.06 U | 1.05 U | **0.286 J** | 1.15 U |
| Cobalt | 7440-48-4 | NE | NE | **8.61** | **8.96** | **4.01** | **3.21** | **6.45** | **5.9** |
| Copper | 7440-50-8 | 10000 | 1720 | **2270** | **510** | **8.72** | **7.1** | **115** | **94.8** |
| Iron | 7439-89-6 | NE | NE | **66000** | **58700** | **16800** | **14400** | **29200** | **30300** |
| Lead | 7439-92-1 | 3900 | 450 | **2360** | **1160** | **3.04** | **2.69** | **236** | **173** |
| Magnesium | 7439-95-4 | NE | NE | **1280** | **2210** | **1470** | **1380** | **1930** | **2910** |
| Manganese | 7439-96-5 | 10000 | 2000 | **442** | **443** | **336** | **242** | **276** | **346** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **14.5 J** | **1.37** | 0.027 U | 0.024 U | **0.547** | **0.451** |
| Nickel | 7440-02-0 | 10000 | 130 | **23.9** | **41.3** | **12.1** | **7.27** | **17.3** | **18.1** |
| Potassium | 7440-09-7 | NE | NE | **628** | **919** | **764** | **460** | **863** | **857** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.468 J** | **1.24** | 0.53 U | 0.563 U | 0.602 U | **1.47** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.94** | **0.325 J** | 0.53 U | 0.563 U | 0.602 U | 0.63 U |
| Sodium | 7440-23-5 | NE | NE | **121** | **236** | **29.7 J** | 56.3 U | **92** | **51.3 J** |
| Thallium | 7440-28-0 | NE | NE | 0.651 U | 0.581 U | 0.53 U | 0.563 U | 0.602 U | 0.63 U |
| Vanadium | 7440-62-2 | NE | NE | **27.4** | **25.3** | **16** | **15.4** | **27.4** | **28.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **3180** | **526** | **14.1** | **12.1** | **244** | **220** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.8 U | 2.6 U | 2.6 U | 2.9 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **61000** | **41800** | 1000 U | 1000 U | **67600** | **15700** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP515 | GPEC-TP516 | GPEC-TP516 | GPEC-TP570 | GPEC-TP571 | GPEC-SB 501 | GPEC-SB501 |
| | | | Sample Name | GPEC-TP515 (9.5-10) | GPEC-TP516 (0.5-1.5) | GPEC-SS-XX-072417 | GPEC-TP570 (3-4) | GPEC-TP571 (9.5-10) | GPEC-SB 501 | GPEC-SB501 |
| | | | Start Depth | 9.5 | 0.5 | 0 | 3 | 9.5 | 7 | 17.5 |
| | | | End Depth | 10 | 1.5 | 0 | 4 | 10 | 8 | 18.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/21/2017 | 7/24/2017 | 7/24/2017 | 8/10/2017 | 8/16/2017 | 12/20/2017 | 12/29/2017 |
| | | | Parent Sample Code | | | GPEC-TP516 (0.5-1.5) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.06 U | 0.06 U | 0.06 U | 0.06 U | 0.054 UJ | 0.059 U | 0.056 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.119 U | 0.12 U | 0.119 U | 0.12 U | 0.109 R | 0.118 U | 0.113 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.119 U | 0.12 U | 0.119 U | 0.12 U | 0.109 UJ | 0.118 U | 0.113 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Bromoform | 75-25-2 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.024 U | 0.024 U | 0.024 U | 0.024 U | 0.022 UJ | 0.012 U | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.012 U | 0.012 U | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.019 CD** | **0.028 CD** | **0.027 CD** | 0.012 U | 0.011 UJ | 0.012 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00596 U | 0.00602 U | 0.00595 U | 0.006 U | 0.00544 UJ | 0.00589 U | 0.00563 U |
| Total VOCs | TVOC | NE | NE | **0.019** | **0.028** | **0.027** | ND | ND | ND | ND |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | **0.112** | **0.092** | **0.217** | 0.036 U | **0.281** | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.038 U | **1.87** | **2.17** | **0.356** | 0.036 U | **0.157** | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.038 U | **0.74** | **0.871** | **0.545** | 0.036 U | **0.685** | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.038 U | **2.44** | **2.23** | **4.52** | **0.08** | **1.34** | 0.036 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.038 U | **2.42** | **2.8** | **6.09** | **0.062** | **4.25** | 0.036 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | **0.307** | **0.206** | **0.333** | 0.036 U | **0.306** | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | **0.685** | **0.695** | **0.089** | 0.036 U | **0.066** | 0.036 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | **0.962** | **1.02** | **0.145** | 0.036 U | **0.089** | 0.036 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.038 U | **1.81** | **1.71** | **5.32** | 0.036 U | **3.28** | 0.036 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.038 U | **3.97** | **4.35** | **5.97** | **0.106** | **4.57** | 0.036 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.038 U | **2.09** | **2.65** | **2.37** | **0.064** | **2.48** | 0.036 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.038 U | **2.39** | **3.13** | **2.59** | **0.087** | **1.73** | 0.036 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.038 U | **3.2** | **3.6** | **2.94** | **0.052** | **1.82** | 0.036 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.038 U | **2.26** | **2.8** | **2.01** | **0.086** | **1.41** | 0.036 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.038 U | **2.7** | **3.29** | **2.96** | **0.073** | **2.6** | 0.036 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | **0.83** | **0.875** | **0.94** | 0.036 U | **0.361** | 0.036 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.038 U | **2.18** | **2.24** | **3.09** | **0.051** | **1.15** | 0.036 U |
| Total PAHs | TPAH | NE | NE | ND | **30.966** | **34.729** | **40.485** | **0.661** | **26.575** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP515 | GPEC-TP516 | GPEC-TP516 | GPEC-TP570 | GPEC-TP571 | GPEC-SB 501 | GPEC-SB501 |
| | | | Sample Name | GPEC-TP515 (9.5-10) | GPEC-TP516 (0.5-1.5) | GPEC-SS-XX-072417 | GPEC-TP570 (3-4) | GPEC-TP571 (9.5-10) | GPEC-SB 501 | GPEC-SB501 |
| | | | Start Depth | 9.5 | 0.5 | 0 | 3 | 9.5 | 7 | 17.5 |
| | | | End Depth | 10 | 1.5 | 0 | 4 | 10 | 8 | 18.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/21/2017 | 7/24/2017 | 7/24/2017 | 8/10/2017 | 8/16/2017 | 12/20/2017 | 12/29/2017 |
| | | | Parent Sample Code | | | GPEC-TP516 (0.5-1.5) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 R | 0.038 U | 0.036 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 UJ | 0.038 U | 0.036 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 UJ | 0.038 U | 0.036 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 UJ | 0.038 U | 0.036 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | **0.108** | 0.036 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | **0.108** | **0.092** | **0.37** | 0.036 U | **0.253** | 0.036 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | **0.1** | **0.058** | **0.212** | 0.036 U | **0.175** | 0.036 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 UJ | **0.205** | 0.036 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 R | 0.038 U | 0.036 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.039 U | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U |
| Total SVOCs | TSVOC | NE | NE | ND | **31.174** | **34.879** | **41.067** | **0.661** | **27.316** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP515 | GPEC-TP516 | GPEC-TP516 | GPEC-TP570 | GPEC-TP571 | GPEC-SB 501 | GPEC-SB501 |
| | | | Sample Name | GPEC-TP515 (9.5-10) | GPEC-TP516 (0.5-1.5) | GPEC-SS-XX-072417 | GPEC-TP570 (3-4) | GPEC-TP571 (9.5-10) | GPEC-SB 501 | GPEC-SB501 |
| | | | Start Depth | 9.5 | 0.5 | 0 | 3 | 9.5 | 7 | 17.5 |
| | | | End Depth | 10 | 1.5 | 0 | 4 | 10 | 8 | 18.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/21/2017 | 7/24/2017 | 7/24/2017 | 8/10/2017 | 8/16/2017 | 12/20/2017 | 12/29/2017 |
| | | | Parent Sample Code | | | GPEC-TP516 (0.5-1.5) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.12 U | 0.117 U | 0.113 U | 0.022 U | 0.024 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.055 U | 0.3 U | 0.292 U | 0.056 U | 0.054 U | 0.059 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00438 U | 0.024 U | 0.023 U | 0.00451 U | 0.00429 U | 0.0047 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.055 U | 0.3 U | 0.292 U | 0.056 U | 0.054 U | 0.059 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.018 U | 0.019 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.018 U | 0.019 U | NA |
| Silvex | 93-72-1 | 1000 | | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.018 U | 0.019 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4180** | **1600** | **2330** | **10600** | **8490** | **10200** | **5020** |
| Antimony | 7440-36-0 | NE | NE | 0.633 U | **10.2** | **14.5** | **8.21** | **0.292 J** | **2.54** | 0.565 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.971** | **9.26** | **13.3** | **10.9** | **2.67** | **12.7** | **1.97** |
| Barium | 7440-39-3 | 10000 | 820 | **24.3** | **208** | **234** | **94.8** | **67.4** | **102** | **44.2** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.633 U | 0.647 U | 0.636 U | **0.461 J** | **0.554 J** | **0.465 J** | **0.31 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.633 U | 0.647 U | 0.636 U | **0.862** | 0.563 U | 0.63 U | 0.565 U |
| Calcium | 7440-70-2 | NE | NE | **738** | **1970** | **1470** | **1600** | **1680** | **1660** | **500** |
| Chromium | 7440-47-3 | NE | NE | **13** | **11.3** | **13.9** | **22.8** | **22** | **44.5** | **23.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 1.2 U | 1.19 U | 1.2 U | 1.09 UJ | 1.18 U | 1.13 U |
| Cobalt | 7440-48-4 | NE | NE | **3.75** | **1.16** | **1.56** | **6.28** | **7** | **4.64** | **4.08** |
| Copper | 7440-50-8 | 10000 | 1720 | **8.32** | **243** | **282** | **157** | **34.5** | **155** | **24.6** |
| Iron | 7439-89-6 | NE | NE | **20800** | **14400** | **18100** | **24500** | **18000** | **21900** | **42500** |
| Lead | 7439-92-1 | 3900 | 450 | **2.9** | **395** | **491** | **197** | **21.2** | **262** | **4.15** |
| Magnesium | 7439-95-4 | NE | NE | **1250** | **218** | **375** | **2110** | **3090** | **1970** | **1250** |
| Manganese | 7439-96-5 | 10000 | 2000 | **164** | **27.9** | **51.2** | **162** | **304** | **130** | **316** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.029 U | **2.45** | **2.78** | **0.527** | **0.095** | **1.69** | 0.028 U |
| Nickel | 7440-02-0 | 10000 | 130 | **8.86** | **8.73** | **12.1** | **18.6** | **41.4** | **12.5** | **7.79** |
| Potassium | 7440-09-7 | NE | NE | **417** | **455** | **553** | **897** | **1190** | **784** | **1080** |
| Selenium | 7782-49-2 | 6800 | 4 | 0.633 U | **0.456 J** | **3.96** | **1.58** | 0.563 U | **2.78** | **0.487 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.633 U | **0.759** | **1.02** | **0.331 J** | 0.563 U | **0.343 J** | 0.565 U |
| Sodium | 7440-23-5 | NE | NE | 63.3 U | **125** | **153** | **99.2** | **74.9** | **67.3** | **103** |
| Thallium | 7440-28-0 | NE | NE | 0.633 U | 0.647 U | 0.636 U | 0.622 U | 0.563 U | 0.63 U | 0.565 U |
| Vanadium | 7440-62-2 | NE | NE | **22.2** | **21.3** | **33.7** | **29.8** | **33.6** | **37.5** | **40.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **20.9** | **23** | **43** | **196** | **51.5** | **79.8** | **24.5** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | **2.3 J** | **1.9 J** | 3 U | 2.7 U | 2.9 U | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **146000** | **124000** | **38000** | **8220** | **32900** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB501 | GPEC-SB 502 | GPEC-SB502 | GPEC-SB502 | GPEC-SB503 | GPEC-SB503 | GPEC-SB503 |
| | | | Sample Name | GPEC-SB501 | GPEC-SB 502 | GPEC-SB502 (62-63) | GPEC-SB502 (112-113) | GPEC-SB503 | GPEC-SB503 | GPEC-SB503 |
| | | | Start Depth | 99 | 7 | 62 | 112 | 7 | 53 | 119 |
| | | | End Depth | 100 | 8 | 63 | 113 | 8 | 54 | 120 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/2/2018 | 12/22/2017 | 1/12/2018 | 1/12/2018 | 12/22/2017 | 1/11/2018 | 1/11/2018 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.173 D** | 0.054 U | 0.056 UJ | **0.062 J** | 0.059 U | 0.059 U | **0.135 D** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.125 U | 0.108 U | 0.112 R | 0.117 R | 0.119 U | 0.118 U | 0.119 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.125 U | 0.108 U | 0.112 UJ | 0.117 UJ | 0.119 U | 0.118 U | 0.119 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Bromoform | 75-25-2 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.027 D** | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00627 U | 0.00538 U | 0.00561 UJ | **0.011 J** | 0.00594 U | 0.00588 U | 0.00593 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00627 U | 0.00538 U | 0.00561 UJ | **0.00743 J** | 0.00594 U | 0.00588 U | 0.00593 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.013 U | 0.011 U | 0.011 UJ | 0.012 UJ | 0.012 U | 0.012 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00627 U | 0.00538 U | **0.00324 J** | 0.00583 UJ | 0.00594 U | **0.00491 DJ** | **0.00495 DJ** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00627 U | 0.00538 U | 0.00561 UJ | 0.00583 UJ | 0.00594 U | 0.00588 U | 0.00593 U |
| Total VOCs | TVOC | NE | NE | **0.2** | ND | **0.00324** | **0.08043** | ND | **0.00491** | **0.13995** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.036 J** | 0.039 U | 0.039 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.042 U | **0.051** | 0.036 U | 0.037 U | **0.088** | 0.039 U | 0.039 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.08** | 0.039 U | 0.039 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.238** | 0.039 U | 0.039 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.692** | 0.039 U | 0.039 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.04** | 0.039 U | 0.039 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.042 U | **0.065** | 0.036 U | 0.037 U | **0.027 J** | 0.039 U | 0.039 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.042 U | **0.19** | 0.036 U | 0.037 U | **0.051** | 0.039 U | 0.039 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.397** | 0.039 U | 0.039 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.042 U | **0.031 J** | 0.036 U | 0.037 U | **0.674** | 0.039 U | 0.039 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.396** | 0.039 U | 0.039 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.304** | 0.039 U | 0.039 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.319** | 0.039 U | 0.039 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.263** | 0.039 U | 0.039 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.43** | 0.039 U | 0.039 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.085** | 0.039 U | 0.039 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.201** | 0.039 U | 0.039 U |
| Total PAHs | TPAH | NE | NE | ND | **0.337** | ND | ND | **4.321** | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-SB501 | GPEC-SB 502 | GPEC-SB502 | GPEC-SB502 | GPEC-SB503 | GPEC-SB503 | GPEC-SB503 |
| Sample Name | | | | GPEC-SB501 | GPEC-SB 502 | GPEC-SB502 (62-63) | GPEC-SB502 (112-113) | GPEC-SB503 | GPEC-SB503 | GPEC-SB503 |
| Start Depth | | | | 99 | 7 | 62 | 112 | 7 | 53 | 119 |
| End Depth | | | | 100 | 8 | 63 | 113 | 8 | 54 | 120 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 1/2/2018 | 12/22/2017 | 1/12/2018 | 1/12/2018 | 12/22/2017 | 1/11/2018 | 1/11/2018 |
| Parent Sample Code | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Carbazole | 86-74-8 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.037 J** | 0.039 U | 0.039 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | **0.044** | 0.039 U | 0.039 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.042 U | 0.034 U | 0.036 UJ | 0.037 UJ | 0.038 U | 0.039 U | 0.039 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Pyridine | 110-86-1 | NE | NE | 0.042 U | 0.034 U | 0.036 UJ | 0.037 UJ | 0.038 U | 0.039 U | 0.039 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.042 U | 0.034 U | 0.036 U | 0.037 U | 0.038 U | 0.039 U | 0.039 U |
| Total SVOCs | TSVOC | NE | NE | ND | **0.337** | ND | ND | **4.402** | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB501** | **GPEC-SB 502** | **GPEC-SB502** | **GPEC-SB502** | **GPEC-SB503** | **GPEC-SB503** | **GPEC-SB503** |
| **Sample Name** | | | | **GPEC-SB501** | **GPEC-SB 502** | **GPEC-SB502 (62-63)** | **GPEC-SB502 (112-113)** | **GPEC-SB503** | **GPEC-SB503** | **GPEC-SB503** |
| **Start Depth** | | | | **99** | **7** | **62** | **112** | **7** | **53** | **119** |
| **End Depth** | | | | **100** | **8** | **63** | **113** | **8** | **54** | **120** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **1/2/2018** | **12/22/2017** | **1/12/2018** | **1/12/2018** | **12/22/2017** | **1/11/2018** | **1/11/2018** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.024 U | 0.02 U | 0.022 U | 0.022 U | 0.023 U | 0.023 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.051 U | NA | NA | 0.057 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00407 U | NA | NA | 0.00459 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.051 U | NA | NA | 0.057 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.017 U | NA | NA | 0.019 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.017 U | NA | NA | 0.019 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.017 U | NA | NA | 0.019 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **15300** | **6710** | **4110** | **3650** | **11300** | **5440** | **4890** |
| Antimony | 7440-36-0 | NE | NE | 0.673 U | 0.584 U | 0.579 U | 0.617 U | **28.9** | 0.612 U | 0.636 U |
| Arsenic | 7440-38-2 | 16 | 16 | **11.8** | **1.98** | **1.3** | **4.93** | **35.6** | **1.32** | **4.41** |
| Barium | 7440-39-3 | 10000 | 820 | **49.2** | **29.8** | **37.9** | **16.3** | **240** | **31.9** | **18.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.991** | 0.584 U | **0.353 J** | 0.617 U | **0.678** | 0.612 U | **0.356 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.673 U | 0.584 U | 0.579 U | 0.617 U | **0.761** | 0.612 U | 0.636 U |
| Calcium | 7440-70-2 | NE | NE | **3670** | **1370** | **1930** | **738** | **3960** | **7150** | **77100** |
| Chromium | 7440-47-3 | NE | NE | **38.3** | **15.3** | **14.1** | **11.8** | **75.2** | **16.3** | **16** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.25 U | 1.08 U | 1.12 UJ | 1.17 UJ | 1.19 U | 1.18 U | 1.19 U |
| Cobalt | 7440-48-4 | NE | NE | **9.78** | **3.74** | **5.14** | **4.43** | **8.94** | **4.77** | **4.18** |
| Copper | 7440-50-8 | 10000 | 1720 | **16.8** | **19.1** | **15.4** | **5.1** | **284** | **25.3** | **7.56** |
| Iron | 7439-89-6 | NE | NE | **42400** | **14100** | **17400** | **8830** | **22800** | **16100** | **21400** |
| Lead | 7439-92-1 | 3900 | 450 | **11.6** | **14** | **3.61** | **2.44** | **3770** | **3.55** | **4.05** |
| Magnesium | 7439-95-4 | NE | NE | **7130** | **2440** | **2240** | **1560** | **1900** | **3000** | **2830** |
| Manganese | 7439-96-5 | 10000 | 2000 | **357** | **142** | **363** | **55.7** | **398** | **201** | **208** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.028 U | **0.026** | 0.027 U | 0.025 U | **0.758** | 0.026 U | 0.029 U |
| Nickel | 7440-02-0 | 10000 | 130 | **22.7** | **9.65** | **10.9** | **7.78** | **34.6** | **8.69** | **8.2** |
| Potassium | 7440-09-7 | NE | NE | **4200** | **864** | **859** | **752** | **754** | **997** | **1200** |
| Selenium | 7782-49-2 | 6800 | 4 | **3.09** | **1.31** | **1.32** | **0.827** | **2.2** | **1.08** | **0.64** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.673 U | 0.584 U | 0.579 U | 0.617 U | **1.63** | 0.612 U | 0.636 U |
| Sodium | 7440-23-5 | NE | NE | **519** | **86.2** | **215** | **271** | **105** | **507** | **877** |
| Thallium | 7440-28-0 | NE | NE | **0.406 J** | 0.584 U | 0.579 U | 0.617 U | 0.595 U | 0.612 U | 0.636 U |
| Vanadium | 7440-62-2 | NE | NE | **44** | **22.2** | **33.9** | **18.3** | **30.8** | **30.5** | **20.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **70.2** | **27.7** | **23.5** | **17.2** | **316** | **18.8** | **24.7** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.7 U | 2.8 U | 2.9 U | 3 U | 2.9 U | 3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **24000** | 1000 U | 1000 U | 1000 U | **31400** | **3470** | **12600** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** |
| **Investigation Phase** | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | **GPEC-SB 504** | **GPEC-SB504** | **GPEC-SB504** | **GPEC-SB505** | **GPEC-SB505** | **GPEC-SB505** |
| **Sample Name** | | | **GPEC-SB 504** | **GPEC-SB504** | **GPEC-SB504** | **GPEC-SB505** | **GPEC-SB505** | **GPEC-SB505** |
| **Start Depth** | | | **7** | **53** | **119** | **7** | **54** | **113** |
| **End Depth** | | | **8** | **54** | **120** | **8** | **55** | **114** |
| **Depth Unit** | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | **12/21/2017** | **1/3/2018** | **1/8/2018** | **12/21/2017** | **1/8/2018** | **1/10/2018** |
| **Parent Sample Code** | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.058 U | 0.064 U | **0.061 DJ** | 0.061 U | 0.056 U | **0.051 DJ** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.116 U | 0.128 U | 0.127 U | 0.122 U | 0.113 U | 0.118 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.116 U | 0.128 U | 0.127 U | 0.122 U | 0.113 U | 0.118 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Bromoform | 75-25-2 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | **0.00983 D** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.013 U | 0.013 U | 0.012 U | 0.011 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0058 U | **0.00375 DJ** | 0.00634 U | 0.00609 U | **0.00236 DJ** | 0.00588 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0058 U | 0.00639 U | 0.00634 U | 0.00609 U | 0.00563 U | 0.00588 U |
| Total VOCs | TVOC | NE | NE | ND | **0.00375** | **0.061** | ND | **0.00236** | **0.06083** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.242** | 0.041 U | 0.041 U | **0.377** | 0.036 U | 0.038 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.11** | 0.041 U | 0.041 U | **0.09** | 0.036 U | 0.038 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.529** | 0.041 U | 0.041 U | **0.899** | 0.036 U | 0.038 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.26** | 0.041 U | 0.041 U | **1.14** | 0.036 U | 0.038 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **3.4** | 0.041 U | 0.041 U | **4.76** | 0.036 U | 0.038 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.273** | 0.041 U | 0.041 U | **0.327** | 0.036 U | 0.038 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.079** | 0.041 U | 0.041 U | **0.079** | 0.036 U | 0.038 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.112** | 0.041 U | 0.041 U | **0.093** | 0.036 U | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **2.02** | 0.041 U | 0.041 U | **4** | 0.036 U | 0.038 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **3.51** | 0.041 U | 0.041 U | **5.22** | 0.036 U | 0.038 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.45** | 0.041 U | 0.041 U | **2.68** | 0.036 U | 0.038 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.85** | 0.041 U | 0.041 U | **1.76** | 0.036 U | 0.038 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.59** | 0.041 U | 0.041 U | **1.3** | 0.036 U | 0.038 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.48** | 0.041 U | 0.041 U | **1.23** | 0.036 U | 0.038 U |
| Chrysene | 218-01-9 | 110 | 1 | **2.54** | 0.041 U | 0.041 U | **2.73** | 0.036 U | 0.038 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.431** | 0.041 U | 0.041 U | **0.442** | 0.036 U | 0.038 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.09** | 0.041 U | 0.041 U | **0.966** | 0.036 U | 0.038 U |
| Total PAHs | TPAH | NE | NE | **22.966** | ND | ND | **28.093** | ND | ND |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB 504 | GPEC-SB504 | GPEC-SB504 | GPEC-SB505 | GPEC-SB505 | GPEC-SB505 |
| | | | Sample Name | GPEC-SB 504 | GPEC-SB504 | GPEC-SB504 | GPEC-SB505 | GPEC-SB505 | GPEC-SB505 |
| | | | Start Depth | 7 | 53 | 119 | 7 | 54 | 113 |
| | | | End Depth | 8 | 54 | 120 | 8 | 55 | 114 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/21/2017 | 1/3/2018 | 1/8/2018 | 12/21/2017 | 1/8/2018 | 1/10/2018 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | **0.167** | 0.041 U | 0.041 U | **0.26** | 0.036 U | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.142** | 0.041 U | 0.041 U | **0.158** | 0.036 U | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.041 U | 0.041 U | 0.04 U | 0.036 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **23.275** | ND | ND | **28.511** | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** | **Area 6** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB 504** | **GPEC-SB504** | **GPEC-SB504** | **GPEC-SB505** | **GPEC-SB505** | **GPEC-SB505** |
| **Sample Name** | | | | **GPEC-SB 504** | **GPEC-SB504** | **GPEC-SB504** | **GPEC-SB505** | **GPEC-SB505** | **GPEC-SB505** |
| **Start Depth** | | | | **7** | **53** | **119** | **7** | **54** | **113** |
| **End Depth** | | | | **8** | **54** | **120** | **8** | **55** | **114** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **12/21/2017** | **1/3/2018** | **1/8/2018** | **12/21/2017** | **1/8/2018** | **1/10/2018** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.025 U | 0.025 U | 0.023 U | 0.022 U | 0.024 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.058 U | NA | NA | 0.282 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.0046 U | NA | NA | 0.023 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.058 U | NA | NA | 0.282 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | NA | 0.02 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | NA | 0.02 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | 0.019 U | NA | NA | 0.02 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8600** | **3840** | **16300** | **10300** | **3590** | **3770** |
| Antimony | 7440-36-0 | NE | NE | **3.81** | 0.664 U | **0.281 J** | **1.91** | 0.606 U | 0.622 U |
| Arsenic | 7440-38-2 | 16 | 16 | **14.6** | **1.32** | **9.55** | **13.5** | **0.903** | **6.65** |
| Barium | 7440-39-3 | 10000 | 820 | **182** | **31.9** | **43.2** | **198** | **20.3** | **13.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.434 J** | 0.664 U | **0.994** | **0.455 J** | 0.606 U | 0.622 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.535 J** | 0.664 U | 0.653 U | **1.69** | 0.606 U | 0.622 U |
| Calcium | 7440-70-2 | NE | NE | **2400** | **1370** | **3730** | **6880** | **1290** | **925** |
| Chromium | 7440-47-3 | NE | NE | **25.6** | **7.81** | **38.8** | **416** | **10.6** | **11.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.16 U | 1.28 U | 1.27 U | 1.22 U | 1.13 U | 1.18 U |
| Cobalt | 7440-48-4 | NE | NE | **8.73** | **3.15** | **11.4** | **7.5** | **2.96** | **3.81** |
| Copper | 7440-50-8 | 10000 | 1720 | **113** | **7.22** | **18.2** | **227** | **9.5** | **5.09** |
| Iron | 7439-89-6 | NE | NE | **37100** | **8900** | **42900** | **23700** | **9310** | **13700** |
| Lead | 7439-92-1 | 3900 | 450 | **442** | **2.55** | **11.6** | **633** | **2.46** | **2.32** |
| Magnesium | 7439-95-4 | NE | NE | **1900** | **1770** | **7760** | **2270** | **1770** | **1940** |
| Manganese | 7439-96-5 | 10000 | 2000 | **464** | **197** | **360** | **313** | **166** | **207** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **3.07** | 0.03 U | **0.014 J** | **3.29** | 0.024 U | 0.025 U |
| Nickel | 7440-02-0 | 10000 | 130 | **17** | **7.15** | **24.5** | **18.8** | **6.95** | **7.21** |
| Potassium | 7440-09-7 | NE | NE | **850** | **731** | **4240** | **974** | **676** | **729** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.59** | **0.758** | **3.74** | **1.71** | **0.968** | **0.529 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.355 J** | 0.664 U | 0.653 U | **0.451 J** | 0.606 U | 0.622 U |
| Sodium | 7440-23-5 | NE | NE | **116** | **172** | **872** | **123** | **143** | **262** |
| Thallium | 7440-28-0 | NE | NE | 0.602 U | 0.664 U | 0.653 U | 0.646 U | 0.606 U | 0.622 U |
| Vanadium | 7440-62-2 | NE | NE | **31.2** | **12** | **44.9** | **31.8** | **16.1** | **15.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **266** | **14.9** | **68.9** | **533** | **14.6** | **18.7** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3.2 U | 3.2 U | 3 U | 2.8 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **47300** | 1000 U | **7180** | **52800** | 1000 U | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D |
| | | | Sample Name | GPEC-SB-6 (3-4) | GPEC-SB-6 (10-12) | GPEC-SB-6 (20-22) | GPEC-SB-6 (48-50) | GPEC-SB-7 (3-4) | GPEC-SB-7 (7-8) | GPEC-SB-7 (8-10) |
| | | | Start Depth | 3 | 10 | 20 | 48 | 3 | 7 | 8 |
| | | | End Depth | 4 | 12 | 22 | 50 | 4 | 8 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2009 | 4/23/2009 | 4/23/2009 | 4/24/2009 | 3/31/2009 | 3/31/2009 | 5/21/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | **0.001 J** | 0.0067 U | 0.0059 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.0014 J** | 0.0062 U | 0.0062 U | 0.0063 U | **0.00079 J** | **0.00049 J** | 0.0059 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | **0.00095 J** | 0.0067 U | 0.0059 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | **0.0059** | 0.0067 U | 0.0059 U |
| Total BTEX | TBTEX | NE | NE | **0.0014** | ND | ND | ND | **0.00864** | **0.00049** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.022 U | 0.025 UJ | 0.025 UJ | 0.025 UJ | **0.043 J** | **0.0091 J** | **0.0049 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Bromoform | 75-25-2 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0055 UJ | 0.0062 UJ | 0.0062 UJ | 0.0063 UJ | 0.0058 U | 0.0067 U | 0.0059 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.012 U | 0.012 U | 0.013 U | 0.012 U | 0.013 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0055 UJ | 0.0062 UJ | 0.0062 UJ | 0.0063 UJ | 0.0058 UJ | 0.0067 UJ | 0.0059 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0055 U | 0.0062 U | 0.0062 U | **0.00093 J** | 0.0058 U | 0.0067 U | 0.0059 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.012 U | 0.012 U | 0.013 U | 0.012 U | 0.013 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.022 U | 0.025 U | 0.025 U | 0.025 U | 0.023 U | 0.027 U | 0.024 U |
| Styrene | 100-42-5 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0055 UJ | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0055 U | 0.0062 U | 0.0062 U | 0.0063 U | 0.0058 U | 0.0067 U | 0.0059 U |
| Total VOCs | TVOC | NE | NE | **0.0014** | ND | ND | **0.00093** | **0.05164** | **0.00959** | **0.0049** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.069 J** | **0.041 J** | 0.32 U | 0.33 U | **0.73** | **8.1** | **0.12 J** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.16 J** | 0.33 U | 0.32 U | 0.33 U | **3.9** | **3.6 J** | **0.054 J** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.23 J** | **0.036 J** | 0.32 U | 0.33 U | **3.5** | **17** | **0.37** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.51** | 0.33 U | 0.32 U | 0.33 U | **3 J** | **20 J** | **0.67** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **1.9** | **0.065 J** | 0.32 U | 0.33 U | **7.6** | **58** | **1.8** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.056 J** | **0.031 J** | 0.32 U | 0.33 U | **1.4** | **11** | **0.18 J** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.044 J** | **0.027 J** | 0.32 U | 0.33 U | **1.1** | **3.6** | **0.029 J** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.059 J** | **0.019 J** | 0.32 U | 0.33 U | **1.4** | **7.4** | **0.05 J** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.94** | **0.14 J** | 0.32 U | **0.022 J** | **6.5** | **74 J** | **1.4** |
| Pyrene | 129-00-0 | 1000 | 1000 | **1.2** | **0.1 J** | 0.32 U | 0.33 U | **11** | **48** | **1.7** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1** | **0.037 J** | 0.32 U | 0.33 U | **5.2** | **23** | **0.76** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.3** | 0.33 U | 0.32 U | 0.33 U | **6.8** | **25** | **0.86** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.6** | 0.33 U | 0.32 U | 0.33 U | **5.2** | **23** | **0.92** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.64** | 0.33 U | 0.32 U | 0.33 U | **1.7** | **9.6** | **0.32** |
| Chrysene | 218-01-9 | 110 | 1 | **1.1** | **0.04 J** | 0.32 U | 0.33 U | **5.9** | **24** | **0.81** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.31** | 0.33 U | 0.32 U | 0.33 U | **0.88 J** | **5.1 J** | **0.11 J** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.52** | 0.33 U | 0.32 U | 0.33 U | **3 J** | **21 J** | **0.56** |
| Total PAHs | TPAH | NE | NE | **11.638** | **0.536** | ND | **0.022** | **68.81** | **381.4** | **10.713** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D |
| | | | Sample Name | GPEC-SB-6 (3-4) | GPEC-SB-6 (10-12) | GPEC-SB-6 (20-22) | GPEC-SB-6 (48-50) | GPEC-SB-7 (3-4) | GPEC-SB-7 (7-8) | GPEC-SB-7 (8-10) |
| | | | Start Depth | 3 | 10 | 20 | 48 | 3 | 7 | 8 |
| | | | End Depth | 4 | 12 | 22 | 50 | 4 | 8 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2009 | 4/23/2009 | 4/23/2009 | 4/24/2009 | 3/31/2009 | 3/31/2009 | 5/21/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.031 J** | **0.13 J** | **0.098 J** | **0.06 J** | **0.42 J** | 3.6 U | 0.32 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | **0.018 J** | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Carbazole | 86-74-8 | NE | NE | **0.063 J** | 0.33 U | 0.32 U | 0.33 U | **0.36 J** | **7.2** | **0.095 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.29 U | 0.33 UJ | 0.32 UJ | 0.33 UJ | 0.62 U | 3.6 U | 0.32 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.039 J** | 0.33 U | 0.32 U | 0.33 U | 0.62 U | **8** | **0.12 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.73 U | 0.83 UJ | 0.8 UJ | 0.82 UJ | 1.5 U | 9 U | 0.78 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | **0.54 J** | 0.32 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.73 U | 0.83 U | 0.8 U | 0.82 U | 1.5 U | 9 U | 0.78 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | **0.38 J** | 0.32 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | **1 J** | 0.32 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.9 U | 2.1 UJ | 2 UJ | 2.1 UJ | 3.9 U | 23 U | 2 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | **0.57 J** | 0.32 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.9 U | 2.1 U | 2 U | 2.1 U | 3.9 U | 23 U | 2 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.29 U | 0.33 U | 0.32 U | 0.33 U | 0.62 U | 3.6 U | 0.32 U |
| Total SVOCs | TSVOC | NE | NE | **11.789** | **0.666** | **0.098** | **0.082** | **69.59** | **399.09** | **10.928** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB06/MW-6 | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D |
| | | | Sample Name | GPEC-SB-6 (3-4) | GPEC-SB-6 (10-12) | GPEC-SB-6 (20-22) | GPEC-SB-6 (48-50) | GPEC-SB-7 (3-4) | GPEC-SB-7 (7-8) | GPEC-SB-7 (8-10) |
| | | | Start Depth | 3 | 10 | 20 | 48 | 3 | 7 | 8 |
| | | | End Depth | 4 | 12 | 22 | 50 | 4 | 8 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/31/2009 | 4/23/2009 | 4/23/2009 | 4/24/2009 | 3/31/2009 | 3/31/2009 | 5/21/2009 |
| | | | Parent Sample Code | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | 0.019 UJ | 0.023 U | 0.02 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | 0.019 UJ | 0.023 U | 0.02 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | 0.019 UJ | 0.023 U | 0.02 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | 0.019 UJ | 0.023 U | 0.02 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | **0.035 J** | **0.025 J** | 0.02 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.018 UJ | 0.021 U | 0.021 U | 0.021 U | 0.019 UJ | 0.023 U | 0.02 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.006 J** | 0.021 U | 0.021 U | 0.021 U | **0.09 J** | **0.067** | **0.033** |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.006** | ND | ND | ND | **0.125** | **0.092** | **0.033** |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5860** | **4080** | **2360** | **2510** | **4430** | **8990** | **7070** |
| Antimony | 7440-36-0 | NE | NE | 4.3 UJ | 4.9 UJ | 5.1 UJ | 5 UJ | 4.5 UJ | 5.3 UJ | 4.7 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | **6.5** | 6.3 UJ | 6.4 UJ | 6.4 UJ | **5** | **4.8** | 6 U |
| Barium | 7440-39-3 | 10000 | 820 | **228** | **28.3** | **15.8** | **14.1** | **80.7** | **93.6** | **44.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.36 J** | **0.26 J** | **0.11 J** | **0.1 J** | **0.35 J** | **0.64 J** | **0.6 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.1 J** | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **6390 J** | **1700** | **691** | **10700** | **12800 J** | **8640 J** | **2700 J** |
| Chromium | 7440-47-3 | NE | NE | **16 J** | **10.4** | **5.2** | **5.6** | **13 J** | **20.2 J** | **15 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **2.2** | **0.71 J** | 1.1 U | **0.51 J** | **0.88 J** | 1.1 UJ | **0.42 J** |
| Cobalt | 7440-48-4 | NE | NE | **4.8** | **3.5** | **2.5** | **2.7** | **4.4** | **7.4** | **5.4** |
| Copper | 7440-50-8 | 10000 | 1720 | **273** | **15.6 J** | **8.5 J** | **8.5 J** | **210** | **166** | **26.7 J** |
| Iron | 7439-89-6 | NE | NE | **15900** | **10300 J** | **5720 J** | **5850 J** | **11400** | **15300** | **12900** |
| Lead | 7439-92-1 | 3900 | 450 | **351** | 4.6 U | 4.6 U | 4.5 U | **199** | **196** | **22.5 J** |
| Magnesium | 7439-95-4 | NE | NE | **2910 J** | **2690** | **1340** | **6310** | **6550 J** | **3980 J** | **3090** |
| Manganese | 7439-96-5 | 10000 | 2000 | **762** | **207 J** | **90.7 J** | **104 J** | **277** | **272** | **216 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.2** | **0.013 J** | **0.0064 J** | 0.058 U | **1.6** | **0.53** | **0.11** |
| Nickel | 7440-02-0 | 10000 | 130 | **17.6** | **8.4 J** | **5.6 J** | **6.3 J** | **21.3** | **29.9** | **12.6** |
| Potassium | 7440-09-7 | NE | NE | **740** | **1140 J** | **408 J** | **410 J** | **560** | **1120** | **857** |
| Selenium | 7782-49-2 | 6800 | 4 | 9.8 UJ | 11.2 UJ | 11.5 UJ | 11.4 UJ | 10.3 UJ | 12 UJ | 10.6 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | **1.1 J** | 1.5 U | 1.5 U | 1.5 U | **0.19 J** | 1.6 U | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **151 J** | **139** | **154** | **93** | **100 J** | **132 J** | 119 U |
| Thallium | 7440-28-0 | NE | NE | **2 J** | **1.8 J** | 4.6 U | **1.3 J** | **1.5 J** | 4.8 U | 4.3 U |
| Vanadium | 7440-62-2 | NE | NE | **18.9 J** | **13.8** | **6.2** | **6.6** | **23.1 J** | **25.5 J** | **17.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **650 J** | **33.2 J** | **19.8 J** | **12.4 J** | **207 J** | **172 J** | **34.3 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.22 UJ | 0.25 U | 0.25 U | 0.25 U | 0.23 UJ | 0.27 UJ | 0.232 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **80.7** | **76.9** | **75.5** | **75.5** | **87.9** | **69.8** | **85.7** |
| Total Organic Carbon | TOC | NE | NE | **22100** | **957** | **250** | **6020** | **46300** | **34000** | **3580** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 |
| | | | Sample Name | GPEC-SB-7 (88-90) | GPEC-SB-7 (112-114) | GPEC-SB-10 (3-4) | GPEC-SB-10 (10-12) | GPEC-SB-10 (42-44) | GPEC-SB-10 (68-70) |
| | | | Start Depth | 88 | 112 | 3 | 10 | 42 | 68 |
| | | | End Depth | 90 | 114 | 4 | 12 | 44 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/26/2009 | 5/26/2009 | 4/3/2009 | 6/3/2009 | 6/4/2009 | 6/5/2009 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.023 U | **0.0038 J** | **0.024 J** | **0.0065 J** | **0.011 J** | **0.006 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Bromoform | 75-25-2 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 UJ | 0.0062 U | 0.006 U | 0.0057 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.017 U | 0.012 U | 0.012 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0058 U | 0.0062 U | 0.0086 UJ | 0.0062 U | 0.006 U | 0.0057 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0058 U | 0.0062 U | 0.0086 UJ | 0.0062 U | 0.006 U | 0.0057 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 UJ | 0.0062 U | 0.006 U | 0.0057 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.012 U | 0.017 U | 0.012 U | 0.012 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.023 U | 0.025 U | 0.034 U | 0.025 U | 0.024 U | 0.023 U |
| Styrene | 100-42-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0058 U | 0.0062 U | 0.0086 U | 0.0062 U | 0.006 U | 0.0057 U |
| Total VOCs | TVOC | NE | NE | ND | **0.0038** | **0.024** | **0.0065** | **0.011** | **0.006** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.31 U | 0.34 U | **7.2** | 0.33 U | 0.32 U | 0.3 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.31 U | 0.34 U | **1 J** | 0.33 U | 0.32 U | 0.3 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.31 U | 0.34 U | **9.5** | 0.33 U | 0.32 U | 0.3 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.31 U | 0.34 U | **13** | 0.33 U | 0.32 U | 0.3 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.31 U | 0.34 U | **48** | 0.33 U | 0.32 U | 0.3 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.31 U | 0.34 U | **8.4** | 0.33 U | 0.32 U | 0.3 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.31 U | 0.34 U | **0.75 J** | 0.33 U | 0.32 U | 0.3 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.31 U | 0.34 U | **1.5 J** | 0.33 U | 0.32 U | 0.3 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.31 U | 0.34 U | **26** | 0.33 U | 0.32 U | 0.3 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.31 U | 0.34 U | **43** | 0.33 U | 0.32 U | 0.3 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.31 U | 0.34 U | **19** | 0.33 U | 0.32 U | 0.3 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.31 U | 0.34 U | **19** | 0.33 U | 0.32 U | 0.3 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.31 U | 0.34 U | **16** | 0.33 U | 0.32 U | 0.3 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.31 U | 0.34 U | **6** | 0.33 U | 0.32 U | 0.3 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.31 U | 0.34 U | **19** | 0.33 U | 0.32 U | 0.3 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.31 U | 0.34 U | **3.1 J** | 0.33 U | 0.32 U | 0.3 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.31 U | 0.34 U | **13** | 0.33 U | 0.32 U | 0.3 U |
| Total PAHs | TPAH | NE | NE | ND | ND | **253.45** | ND | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 |
| | | | Sample Name | GPEC-SB-7 (88-90) | GPEC-SB-7 (112-114) | GPEC-SB-10 (3-4) | GPEC-SB-10 (10-12) | GPEC-SB-10 (42-44) | GPEC-SB-10 (68-70) |
| | | | Start Depth | 88 | 112 | 3 | 10 | 42 | 68 |
| | | | End Depth | 90 | 114 | 4 | 12 | 44 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/26/2009 | 5/26/2009 | 4/3/2009 | 6/3/2009 | 6/4/2009 | 6/5/2009 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Carbazole | 86-74-8 | NE | NE | 0.31 U | 0.34 U | **2.1 J** | 0.33 U | 0.32 U | 0.3 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.78 U | 0.83 U | 12 U | 0.82 U | 0.8 U | 0.75 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.78 U | 0.83 U | 12 U | 0.82 U | 0.8 U | 0.75 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 2 U | 2.1 U | 29 U | 2.1 U | 2 U | 1.9 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.31 U | 0.34 U | 4.6 U | 0.33 U | 0.32 U | 0.3 U |
| Total SVOCs | TSVOC | NE | NE | ND | ND | **255.55** | ND | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB07/MW-7D | GPEC-SB07/MW-7D | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 | GPEC-SB10/MW-10 |
| | | | Sample Name | GPEC-SB-7 (88-90) | GPEC-SB-7 (112-114) | GPEC-SB-10 (3-4) | GPEC-SB-10 (10-12) | GPEC-SB-10 (42-44) | GPEC-SB-10 (68-70) |
| | | | Start Depth | 88 | 112 | 3 | 10 | 42 | 68 |
| | | | End Depth | 90 | 114 | 4 | 12 | 44 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/26/2009 | 5/26/2009 | 4/3/2009 | 6/3/2009 | 6/4/2009 | 6/5/2009 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.02 U | 0.021 U | 0.029 U | 0.021 U | 0.02 U | 0.019 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2250** | **7500** | **7610** | **4890** | **2030** | **1990** |
| Antimony | 7440-36-0 | NE | NE | 4.6 UJ | 5.1 UJ | 6.8 UJ | 5.1 UJ | 4.9 UJ | 4.6 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | 5.9 U | 6.5 UJ | **13.7** | 6.4 U | 6.3 U | 5.9 U |
| Barium | 7440-39-3 | 10000 | 820 | **13.8** | **30.9** | **403** | **29.4** | **8.5** | **13.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.22 J** | **0.65 J** | **0.55 J** | **0.34 J** | **0.17 J** | **0.16 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.4 U | 1.6 UJ | 2.1 U | 1.5 U | 1.5 U | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **7230 J** | **1490 J** | **20600 J** | **723 J** | **5730 J** | **9040 J** |
| Chromium | 7440-47-3 | NE | NE | **4.9 J** | **15.8 J** | **21.3 J** | **7.9 J** | **4.3 J** | **5.5 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.97 U | **0.52 J** | 1.4 U | 1.1 U | 0.97 U | **1** |
| Cobalt | 7440-48-4 | NE | NE | **2.2** | **12.4** | **6.5** | **3.1** | **2.2** | **2.1** |
| Copper | 7440-50-8 | 10000 | 1720 | **8.5 J** | **28.8 J** | **193** | **7.6 J** | **5.8 J** | **6.8 J** |
| Iron | 7439-89-6 | NE | NE | **5720** | **29100** | **23800** | **9240** | **3740** | **5690** |
| Lead | 7439-92-1 | 3900 | 450 | **4.9 J** | **14.6 J** | **834** | **3.8 J** | **1.3 J** | **0.89 J** |
| Magnesium | 7439-95-4 | NE | NE | **4040** | **2520** | **2740 J** | **1560** | **4100** | **4760** |
| Manganese | 7439-96-5 | 10000 | 2000 | **118 J** | **678 J** | **405** | **128 J** | **47.7 J** | **132 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.056 U | **0.012 J** | **1.6** | 0.059 U | 0.06 U | 0.054 U |
| Nickel | 7440-02-0 | 10000 | 130 | **5** | **15.9** | **18.9** | **8.2** | **5.8** | **4.5** |
| Potassium | 7440-09-7 | NE | NE | **456** | **884** | **757** | **408** | **405** | **322** |
| Selenium | 7782-49-2 | 6800 | 4 | 10.5 UJ | 11.7 UJ | 15.4 UJ | 11.5 UJ | 11.2 UJ | 10.5 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.4 U | 1.6 UJ | 2.1 U | 1.5 U | 1.5 U | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **232** | **405** | **397 J** | **126** | **142** | **112** |
| Thallium | 7440-28-0 | NE | NE | 4.2 U | **2.1 J** | **1.7 J** | 4.6 U | 4.5 U | 4.2 U |
| Vanadium | 7440-62-2 | NE | NE | **7.1** | **18.7** | **21.1 J** | **12.1** | **6.2** | **5.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **13.4 J** | **53.9 J** | **451 J** | **20.9 J** | **10.9 J** | **10 J** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.232 U | 0.249 U | 0.34 U | 0.246 U | 0.238 U | 0.227 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **82.5** | **80.4** | **59.2** | **75.3** | **82.5** | **87.4** |
| Total Organic Carbon | TOC | NE | NE | **4780** | **8090** | **34300** | **605 J** | **2100** | **2790** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 |
| | | | Sample Name | GPEC-SB-11 (3-4) | GPEC-SB-11 (8-10) | GPEC-SB-11 (42-44) | GPEC-SB-11 (62-64) | GPEC-SB-12 (12-14) | GPEC-SB-12 (22-24) | GPEC-SB-12 (60-62) |
| | | | Start Depth | 3 | 8 | 42 | 62 | 12 | 22 | 60 |
| | | | End Depth | 4 | 10 | 44 | 64 | 14 | 24 | 62 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/27/2009 | 5/28/2009 | 5/29/2009 | 5/29/2009 | 6/1/2009 | 6/2/2009 | 6/2/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0058 U | 0.0062 U | 0.0057 U | **0.00033 J** | 0.0058 U | 0.0056 U | 0.0058 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0058 U | **0.0062** | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0058 U | **0.017** | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.0232** | ND | **0.00033** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.005 J** | **0.0058 J** | 0.023 U | 0.024 U | **0.036 J** | **0.19 J** | **0.023 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Bromoform | 75-25-2 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0058 UJ | 0.0062 UJ | 0.0057 U | 0.0059 U | 0.0058 UJ | 0.0056 UJ | 0.0058 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.011 U | 0.012 U | 0.012 U | **0.02 J** | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0058 UJ | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | **0.0017 J** | 0.0058 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0058 UJ | 0.0062 UJ | 0.0057 U | 0.0059 U | 0.0058 UJ | 0.0056 UJ | 0.0058 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.012 U | 0.011 U | 0.012 U | 0.012 UJ | 0.011 UJ | 0.012 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.023 U | 0.025 U | 0.023 U | 0.024 U | 0.023 U | 0.023 U | 0.023 U |
| Styrene | 100-42-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | **0.00028 J** | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0058 U | 0.0062 U | 0.0057 U | 0.0059 U | 0.0058 U | 0.0056 U | 0.0058 U |
| Total VOCs | TVOC | NE | NE | **0.005** | **0.029** | ND | **0.00061** | **0.036** | **0.2117** | **0.023** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **3.7** | **1.5** | 0.31 U | 0.32 U | **0.39** | **0.92** | 0.31 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **2.6** | **1.8** | 0.31 U | 0.32 U | **0.74** | **0.24 J** | 0.31 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **5.9** | **0.6** | 0.31 U | 0.32 U | **1** | **0.49** | 0.31 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **6** | **0.53** | 0.31 U | 0.32 U | **0.76** | **0.66** | 0.31 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **22** | **1.8** | 0.31 U | 0.32 U | **4** | **2.6** | 0.31 U |
| Fluorene | 86-73-7 | 1000 | 386 | **3.6** | **0.23 J** | 0.31 U | 0.32 U | **0.87** | **0.81** | 0.31 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **1.2 J** | **0.19 J** | 0.31 U | 0.32 U | **1.3** | **2.2** | **0.012 J** |
| Naphthalene | 91-20-3 | 1000 | 12 | **1.6** | **3.5** | 0.31 U | 0.32 U | **0.14 J** | **4.1** | **0.032 J** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **24** | **0.82** | 0.31 U | 0.32 U | **4.5** | **2.6** | 0.31 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **24** | **1.6** | 0.31 U | 0.32 U | **2.9** | **2** | 0.31 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **11** | **0.78** | 0.31 U | 0.32 U | **2** | **1** | 0.31 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **12** | **0.7** | 0.31 U | 0.32 U | **1.9** | **1.2** | 0.31 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **9.3** | **0.64** | 0.31 U | 0.32 U | **2.1** | **1.5** | 0.31 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **3.5** | **0.22 J** | 0.31 U | 0.32 U | **0.72** | **0.5** | 0.31 U |
| Chrysene | 218-01-9 | 110 | 1 | **11** | **0.94** | 0.31 U | 0.32 U | **2.1** | **1.4** | 0.31 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.6** | **0.17 J** | 0.31 U | 0.32 U | **0.25 J** | **0.22 J** | 0.31 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **6.1** | **0.58** | 0.31 U | 0.32 U | **0.94** | **0.77** | 0.31 U |
| Total PAHs | TPAH | NE | NE | **149.1** | **16.6** | ND | ND | **26.61** | **23.21** | **0.044** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 |
| | | | Sample Name | GPEC-SB-11 (3-4) | GPEC-SB-11 (8-10) | GPEC-SB-11 (42-44) | GPEC-SB-11 (62-64) | GPEC-SB-12 (12-14) | GPEC-SB-12 (22-24) | GPEC-SB-12 (60-62) |
| | | | Start Depth | 3 | 8 | 42 | 62 | 12 | 22 | 60 |
| | | | End Depth | 4 | 10 | 44 | 64 | 14 | 24 | 62 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/27/2009 | 5/28/2009 | 5/29/2009 | 5/29/2009 | 6/1/2009 | 6/2/2009 | 6/2/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.21 J** | **0.077 J** | **0.076 J** | **0.12 J** | **0.24 J** | **0.093 J** | **0.066 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Carbazole | 86-74-8 | NE | NE | **1.4 J** | 0.33 U | 0.31 U | 0.32 U | **0.29 J** | **0.53** | 0.31 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **1.5 J** | **0.16 J** | 0.31 U | 0.32 U | **0.26 J** | **0.37** | 0.31 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | **0.022 J** | 0.31 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | **0.029 J** | 0.31 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 3.9 U | 0.83 U | 0.76 U | 0.8 U | 0.77 U | 0.75 U | 0.77 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 3.9 U | 0.83 U | 0.76 U | 0.8 U | 0.77 U | 0.75 U | 0.77 U |
| Hexachloroethane | 67-72-1 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Isophorone | 78-59-1 | NE | 4.4 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 9.8 U | 2.1 U | 1.9 U | 2 U | 1.9 U | 1.9 U | 2 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 1.6 U | 0.33 U | 0.31 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U |
| Total SVOCs | TSVOC | NE | NE | **152.21** | **16.837** | **0.076** | **0.12** | **27.4** | **24.254** | **0.11** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB11/MW-11 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 | GPEC-SB12/MW-12 |
| | | | Sample Name | GPEC-SB-11 (3-4) | GPEC-SB-11 (8-10) | GPEC-SB-11 (42-44) | GPEC-SB-11 (62-64) | GPEC-SB-12 (12-14) | GPEC-SB-12 (22-24) | GPEC-SB-12 (60-62) |
| | | | Start Depth | 3 | 8 | 42 | 62 | 12 | 22 | 60 |
| | | | End Depth | 4 | 10 | 44 | 64 | 14 | 24 | 62 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/27/2009 | 5/28/2009 | 5/29/2009 | 5/29/2009 | 6/1/2009 | 6/2/2009 | 6/2/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.02 U | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.02 U | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.02 U | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.02 U | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.02 U | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.011 J** | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.0093 J** | 0.021 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.0203** | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6480** | **2990** | **2480** | **1910** | **7000** | **4410** | **3410** |
| Antimony | 7440-36-0 | NE | NE | **1.7 J** | 4.9 UJ | 4.5 UJ | 4.8 UJ | 4.5 UJ | **4.2 J** | 4.8 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | **10.4 J** | **9.5 J** | 5.7 U | 6.1 U | **3.1 J** | **14.4 J** | 6.1 U |
| Barium | 7440-39-3 | 10000 | 820 | **202** | **60.1** | **20.8** | **11.2** | **93.8** | **108** | **22.2** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.42 J** | **0.22 J** | **0.23 J** | **0.18 J** | **0.5 J** | **0.4 J** | **0.29 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.46 J** | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 UJ | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **21100** | **1580 J** | **928 J** | **890 J** | **7390 J** | **6890 J** | **1060 J** |
| Chromium | 7440-47-3 | NE | NE | **52** | **9.8 J** | **4.9 J** | **4.3 J** | **14.7 J** | **20.7 J** | **6.2 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.93 U | **0.8 J** | **1.6** | **2.2** | **3.7** | **0.47 J** | **1.3** |
| Cobalt | 7440-48-4 | NE | NE | **7.9** | **2.2** | **2.5** | **2.3** | **5.5** | **9.1 J** | **2.8** |
| Copper | 7440-50-8 | 10000 | 1720 | **183 J** | **34.5 J** | **8.2 J** | **6.3 J** | **34.9 J** | **131 J** | **8 J** |
| Iron | 7439-89-6 | NE | NE | **33400 J** | **6360** | **5550** | **5540** | **14100** | **58500** | **6700** |
| Lead | 7439-92-1 | 3900 | 450 | **456** | **380 J** | **2 J** | **1.4 J** | **164 J** | **372 J** | **2.4 J** |
| Magnesium | 7439-95-4 | NE | NE | **2480** | **912** | **1460** | **1210** | **2560** | **2110** | **1930** |
| Manganese | 7439-96-5 | 10000 | 2000 | **440 J** | **9080 J** | **63.3 J** | **149 J** | **296 J** | **523 J** | **158 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.9** | **1.4** | 0.057 U | 0.056 U | **2.5** | **0.86** | 0.057 U |
| Nickel | 7440-02-0 | 10000 | 130 | **39 J** | **7.5** | **6.4** | **5.3** | **14.4** | **24** | **7.9** |
| Potassium | 7440-09-7 | NE | NE | **594 J** | **439** | **620** | **318** | **997** | **615** | **806** |
| Selenium | 7782-49-2 | 6800 | 4 | 10.4 UJ | 11.2 UJ | 10.2 UJ | 10.8 UJ | 10.3 UJ | 10.3 UJ | 10.8 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.32 J** | **2.5** | 1.4 U | 1.4 U | 1.4 U | **0.077 J** | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **115** | 208 U | 163 U | 126 U | **304** | **335** | 207 U |
| Thallium | 7440-28-0 | NE | NE | **1.5 J** | **15 J** | 4.1 U | 4.3 U | **2.1 J** | **1.8 J** | 4.3 U |
| Vanadium | 7440-62-2 | NE | NE | **27.9** | **13** | **6.9** | **6.9** | **21.2** | **15.1** | **7.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **369 J** | **118 J** | **12.7 J** | **11 J** | **151 J** | **302 J** | **16.4 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.23 UJ | 0.243 UJ | 0.228 UJ | 0.234 UJ | 0.226 UJ | 0.223 UJ | 0.227 UJ |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **86.2** | **82.1** | **83.9** | **83.4** | **84.9** | **87.2** | **87.3** |
| Total Organic Carbon | TOC | NE | NE | **42200** | **24900** | **221** | **395** | **2110** | **5750** | **319** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB221 | GPEC-SB221 | GPEC-SB221 |
| | | | Sample Name | GPEC-SB-107 (4-5) | GPEC-SB-107/MW11D (15-16) | GPEC-SB-107/MW11D (90-91) | GPEC-SB221 (2-2.5) | GPEC-SB221 (16-17) | GPEC-SB221 (23-24) |
| | | | Start Depth | 4 | 15 | 90 | 2 | 16 | 23 |
| | | | End Depth | 5 | 16 | 91 | 2.5 | 17 | 24 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2010 | 6/9/2010 | 6/10/2010 | 7/5/2012 | 7/12/2012 | 7/12/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0028 U | 0.0029 U | 0.0028 U | **0.00186 J** | 0.01 UJ | 0.00994 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0042 U | **0.0043 J** | 0.0042 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.0056 U | 0.0058 U | 0.0056 U | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | 0.0056 U | 0.0058 U | 0.0056 U | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | NA | NA | NA | 0.011 U | 0.021 UJ | 0.02 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.0043** | ND | **0.00186** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.056 J** | 0.029 U | **0.04** | 0.028 U | 0.052 UJ | **0.058** |
| Acrolein (propenal) | 107-02-8 | NE | NE | R | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | 0.028 U | 0.029 U | 0.028 U | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Bromoform | 75-25-2 | NE | NE | 0.011 U | 0.012 UJ | 0.011 UJ | 0.011 U | 0.01 UJ | 0.00994 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0056 U | 0.0058 U | 0.0056 U | 0.011 U | 0.01 UJ | 0.00994 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.028 U | 0.029 U | 0.028 U | 0.00564 U | 0.021 UJ | **0.011 J** |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | R | R | R | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.0028 J** | 0.029 U | 0.028 U | **0.00896** | **0.805 J** | **0.272** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0056 U | 0.0058 U | 0.0056 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0042 U | 0.0044 U | 0.0042 U | 0.00564 U | 0.021 UJ | 0.02 U |
| Chloromethane | 74-87-3 | NE | NE | 0.014 U | 0.014 U | 0.014 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0028 U | 0.0029 U | 0.0028 U | 0.011 U | 0.01 UJ | 0.00994 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.028 UJ | 0.029 U | 0.028 U | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0042 U | 0.0044 U | 0.0042 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0042 U | 0.0044 U | 0.0042 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0098 U | 0.01 U | 0.0097 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0028 U | 0.0029 U | 0.0028 U | 0.011 U | 0.01 UJ | 0.00994 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0028 U | 0.0029 U | 0.0028 U | 0.011 U | 0.01 UJ | 0.00994 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.011 U | 0.012 U | 0.011 U | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.028 U | 0.029 U | 0.028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0056 U | 0.0058 U | 0.0056 U | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.028 U | 0.029 U | 0.028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.028 U | 0.029 U | 0.028 U | 0.011 U | 0.021 UJ | 0.02 U |
| Styrene | 100-42-5 | NE | NE | 0.0056 U | 0.0058 U | 0.0056 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.056 U | 0.058 U | 0.056 U | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.014 U | 0.014 U | 0.014 U | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0042 U | 0.0044 U | 0.0042 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0028 U | 0.0029 U | 0.0028 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.014 U | 0.014 U | 0.014 U | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.028 U | 0.029 U | 0.028 U | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | 0.028 U | 0.029 U | 0.028 U | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0056 U | 0.0058 U | 0.0056 U | 0.00564 U | 0.01 UJ | 0.00994 U |
| Total VOCs | TVOC | NE | NE | **0.0588** | **0.0043** | **0.04** | **0.01082** | **0.805** | **0.341** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.128 J** | 0.202 U | 0.196 U | 0.037 U | **0.086 J** | 0.066 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.404** | 0.202 U | 0.196 U | 0.037 U | **0.169 J** | **0.088** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.26** | 0.202 U | 0.196 U | 0.037 U | **0.235 J** | **0.127** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.03** | 0.202 U | 0.196 U | 0.037 U | **0.094 J** | **0.109** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **3.15** | 0.202 U | 0.196 U | **0.211** | **0.117 J** | 0.066 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.072 J** | 0.202 U | 0.196 U | 0.037 U | **0.066 J** | 0.066 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.044 J** | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.116 J** | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.468** | **0.00806 J** | 0.196 U | **0.142** | **0.165 J** | 0.066 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **2.85** | 0.202 U | 0.196 U | **0.219** | **0.134 J** | **0.033 J** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.92** | 0.202 U | 0.196 U | **0.1** | **0.05 J** | 0.066 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **1.73** | 0.202 U | 0.196 U | **0.04** | **0.058 J** | 0.066 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.69** | 0.202 U | 0.196 U | **0.044** | **0.044 J** | 0.066 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **1.17** | 0.202 U | 0.196 U | **0.038** | **0.039 J** | 0.066 U |
| Chrysene | 218-01-9 | 110 | 1 | **1.65** | 0.202 U | 0.196 U | **0.144** | **0.06 J** | 0.066 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.34** | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.98** | 0.202 U | 0.196 U | 0.037 U | **0.047 J** | 0.066 U |
| Total PAHs | TPAH | NE | NE | **18.002** | **0.00806** | ND | **0.938** | **1.364** | **0.357** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB221 | GPEC-SB221 | GPEC-SB221 |
| | | | Sample Name | GPEC-SB-107 (4-5) | GPEC-SB-107/MW11D (15-16) | GPEC-SB-107/MW11D (90-91) | GPEC-SB221 (2-2.5) | GPEC-SB221 (16-17) | GPEC-SB221 (23-24) |
| | | | Start Depth | 4 | 15 | 90 | 2 | 16 | 23 |
| | | | End Depth | 5 | 16 | 91 | 2.5 | 17 | 24 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2010 | 6/9/2010 | 6/10/2010 | 7/5/2012 | 7/12/2012 | 7/12/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.2 U | 0.202 U | 0.196 U | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | 0.2 U | 0.202 U | 0.196 U | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | R | R | R | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | R | R | R | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.2 U | 0.202 U | 0.196 U | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.2 U | 0.202 U | 0.196 U | **0.038** | 0.069 UJ | 0.066 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Carbazole | 86-74-8 | NE | NE | **0.06 J** | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.136 J** | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.8 U | 0.806 U | 0.784 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.8 UJ | 0.806 UJ | 0.784 UJ | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | **0.016 J** | 0.202 U | 0.196 U | 0.037 U | **0.081 J** | **6** |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.4 U | 0.403 UJ | 0.392 UJ | 0.037 U | 0.069 UJ | 0.066 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.2 U | 0.202 U | 0.196 U | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.2 U | 0.202 U | 0.196 U | NA | NA | 0.066 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.8 UJ | 0.806 UJ | 0.784 UJ | 0.037 U | 0.069 UJ | 0.066 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | **0.059 J** | **6.65** |
| Pyridine | 110-86-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.2 U | 0.202 U | 0.196 U | 0.037 U | 0.069 UJ | 0.066 U |
| Total SVOCs | TSVOC | NE | NE | **18.214** | **0.00806** | ND | **0.976** | **1.504** | **13.007** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB107/MW-11D | GPEC-SB221 | GPEC-SB221 | GPEC-SB221 |
| | | | Sample Name | GPEC-SB-107 (4-5) | GPEC-SB-107/MW11D (15-16) | GPEC-SB-107/MW11D (90-91) | GPEC-SB221 (2-2.5) | GPEC-SB221 (16-17) | GPEC-SB221 (23-24) |
| | | | Start Depth | 4 | 15 | 90 | 2 | 16 | 23 |
| | | | End Depth | 5 | 16 | 91 | 2.5 | 17 | 24 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2010 | 6/9/2010 | 6/10/2010 | 7/5/2012 | 7/12/2012 | 7/12/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.0183 U | 0.0193 U | 0.0182 U | 0.022 U | 0.041 UJ | 0.039 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | 0.022 U | 0.041 UJ | 0.039 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | 0.022 U | 0.041 UJ | 0.039 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | 0.00445 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | 0.00445 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | 0.00445 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | 0.00445 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | 0.00445 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | 0.056 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | 0.00445 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | 0.00445 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | 0.00445 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | 0.00445 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | 0.00445 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | 0.00445 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | 0.00445 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | 0.00445 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | 0.00445 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | 0.00445 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | 0.00445 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | 0.00445 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | 0.00445 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | 0.00445 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | 0.00445 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | 0.056 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | 0.049 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6500 J** | **10000 J** | **3300 J** | **4210** | **11500 J** | **11000** |
| Antimony | 7440-36-0 | NE | NE | **0.4 J** | 2.3 UJ | 2 UJ | **0.794 J** | 2.32 UJ | 2.14 U |
| Arsenic | 7440-38-2 | 16 | 16 | **4.1 J** | **3** | **1.2** | **82.4** | **1.51 J** | **14** |
| Barium | 7440-39-3 | 10000 | 820 | **240 J** | **12** | **24** | **146** | **63.6 J** | **153** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.78** | **0.56** | **0.36** | **0.528 J** | **0.789 J** | **0.764 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.13 J** | 0.45 U | 0.39 U | **0.254 J** | 1.16 UJ | **1.06 J** |
| Calcium | 7440-70-2 | NE | NE | **6700 J** | **270 J** | **9000 J** | **15900** | **1090 J** | **68300** |
| Chromium | 7440-47-3 | NE | NE | **16 J** | **16** | **8** | **17.2** | **36.4 J** | **49.4** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.9 U | NA | R | R | 2.09 UJ | 1.99 UJ |
| Cobalt | 7440-48-4 | NE | NE | **5.7 J** | **4.7** | **3.2** | **5.25** | **10.8 J** | **12.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **48 J** | **6.3** | **7.3** | **94.5** | **28 J** | **360** |
| Iron | 7439-89-6 | NE | NE | R | **13000 J** | **7900 J** | **60800** | **24000 J** | **30800** |
| Lead | 7439-92-1 | 3900 | 450 | **220 J** | **12** | **6.1** | **157** | **11.8 J** | **214** |
| Magnesium | 7439-95-4 | NE | NE | **3400 J** | **2300 J** | **4700 J** | **549** | **3630 J** | **37500** |
| Manganese | 7439-96-5 | 10000 | 2000 | **250 J** | **70** | **150** | **69** | **240 J** | **330 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.6** | **0.01 J** | 0.042 UJ | **5.64** | **0.228 J** | **0.019 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **20 J** | **9.3** | **7.4** | **17.3** | **21.3 J** | **33.8** |
| Potassium | 7440-09-7 | NE | NE | **1700** | **810** | **890** | **1320** | **2290 J** | **1720** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.2 J** | **0.43 J** | 0.78 U | **1.86 J** | 4.64 UJ | **2.41 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.23 J** | **0.15 J** | **0.07 J** | **0.597** | 1.16 UJ | **0.509 J** |
| Sodium | 7440-23-5 | NE | NE | **150** | **340** | **210** | **567** | **341 J** | **409** |
| Thallium | 7440-28-0 | NE | NE | **0.36 J** | 0.91 U | 0.78 U | **3.19** | 1.16 UJ | **0.322 J** |
| Vanadium | 7440-62-2 | NE | NE | **20 J** | **22** | **9.4** | **30.3** | **42.6 J** | **81** |
| Zinc | 7440-66-6 | 10000 | 2480 | **210 J** | **26 J** | **16 J** | **111** | **51.9 J** | **454** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | NA | 0.236 U | 0.23 U | 1.13 U | 2.09 UJ | 2.26 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **89** | **86** | **90** | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **0.778 J** | R | **0.225** | **86800** | **9700** | **36600** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB221 | GPEC-SB221 | GPEC-TP400 | GPEC-TP401 | GPEC-TP402 | GPEC-TP403 | GPEC-TP405 |
| | | | Sample Name | GPEC-SB221 (89-90) | GPEC-XX071212 | GPEC-TP-400 | GPEC-TP-401 | GPEC-TP-402 | GPEC-TP-403 | GPEC-TP-405 |
| | | | Start Depth | 89 | 89 | 9.5 | 9.5 | 9.5 | 6.5 | 6.5 |
| | | | End Depth | 90 | 90 | 10 | 10 | 10 | 7 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/12/2012 | 7/12/2012 | 4/19/2016 | 4/19/2016 | 4/20/2016 | 4/27/2016 | 4/22/2016 |
| | | | Parent Sample Code | | GPECSB221 (89-90) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.012 U | 0.012 U | 0.02 U | 0.016 U | 0.016 U | 0.013 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.03 U | 0.029 U | 0.029 U | 0.049 U | 0.039 U | **0.334 D** | **0.038 D** |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | 0.115 U | 0.196 U | 0.156 U | 0.163 U | 0.131 U |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | 0.115 U | 0.196 U | 0.156 U | 0.163 U | 0.131 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Bromoform | 75-25-2 | NE | NE | 0.0059 U | 0.0058 U | 0.012 U | 0.02 U | 0.016 U | 0.016 U | 0.013 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.012 U | 0.00573 U | 0.00978 U | 0.00778 U | **0.103 D** | 0.00653 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | 0.012 U | 0.02 U | 0.016 U | 0.016 U | 0.013 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | **0.163 D** | 0.00653 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | 0.012 U | 0.02 U | 0.016 U | 0.016 U | 0.013 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.012 U | 0.012 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.012 U | 0.012 U | 0.02 U | **0.021 CD** | 0.016 U | **0.022 CD** |
| Styrene | 100-42-5 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0059 U | 0.0058 U | 0.00573 U | **0.00462 DJ** | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0059 U | 0.0058 U | 0.00573 U | 0.00978 U | 0.00778 U | 0.00814 U | 0.00653 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | **0.00462** | **0.021** | **0.6** | **0.06** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.067** | 0.038 U | 0.038 U | **0.107** | 0.051 U | 0.051 U | **0.493 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.166 J** | 0.038 UJ | 0.038 U | 0.063 U | 0.051 U | 0.051 U | **0.396 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.28 J** | **0.059 J** | 0.038 U | **0.259** | **0.094** | 0.051 U | **2.83 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.611 J** | 0.038 UJ | 0.038 U | **0.22** | **0.168** | 0.051 U | **0.878 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.039 U | 0.038 U | 0.038 U | **2.31** | **1.15** | **0.052** | **12.6 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.035 J** | 0.038 U | 0.038 U | **0.088** | 0.051 U | **0.056** | **1.22 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | **0.043 J** | **0.159 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.039 U | 0.038 U | 0.038 U | **0.041 J** | 0.051 U | **0.062** | **0.083 DJ** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.03 J** | 0.038 U | 0.038 U | **1.49** | **0.418** | **0.063** | **7.72 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.049** | 0.038 U | 0.038 U | **1.93** | **0.917** | **0.061** | **8.94 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.039 U | 0.038 U | 0.038 U | **0.971** | **0.629** | **0.037 J** | **5.29 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.025 J** | 0.038 U | 0.038 U | **0.608** | **0.409** | 0.051 U | **3.34 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.044** | 0.038 U | 0.038 U | **0.535** | **0.44** | 0.051 U | **2.69 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.023 J** | 0.038 U | 0.038 U | **0.527** | **0.333** | 0.051 U | **3.59 D** |
| Chrysene | 218-01-9 | 110 | 1 | 0.039 U | 0.038 U | 0.038 U | **1.1** | **0.655** | **0.069** | **5.11 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.244 J** | 0.038 UJ | 0.038 U | **0.071** | **0.054** | 0.051 U | **0.316 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.383 J** | 0.038 UJ | 0.038 U | **0.228** | **0.199** | 0.051 U | **1.07 D** |
| Total PAHs | TPAH | NE | NE | **1.957** | **0.059** | ND | **10.485** | **5.466** | **0.443** | **56.725** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB221 | GPEC-SB221 | GPEC-TP400 | GPEC-TP401 | GPEC-TP402 | GPEC-TP403 | GPEC-TP405 |
| | | | Sample Name | GPEC-SB221 (89-90) | GPEC-XX071212 | GPEC-TP-400 | GPEC-TP-401 | GPEC-TP-402 | GPEC-TP403 | GPEC-TP-405 |
| | | | Start Depth | 89 | 89 | 9.5 | 9.5 | 9.5 | 6.5 | 6.5 |
| | | | End Depth | 90 | 90 | 10 | 10 | 10 | 7 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/12/2012 | 7/12/2012 | 4/19/2016 | 4/19/2016 | 4/20/2016 | 4/27/2016 | 4/22/2016 |
| | | | Parent Sample Code | | GPECSB221 (89-90) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | **0.088** | 0.051 U | 0.085 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Carbazole | 86-74-8 | NE | NE | 0.039 U | 0.038 U | 0.038 U | **0.089** | 0.051 U | 0.051 U | **0.217 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.039 U | 0.038 U | 0.038 U | **0.049 J** | 0.051 U | 0.051 U | **0.606 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | **0.085** | 0.085 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.038 U | 0.038 U | 0.063 U | 0.051 U | 0.051 U | 0.085 U |
| Total SVOCs | TSVOC | NE | NE | **1.957** | **0.059** | ND | **10.623** | **5.554** | **0.528** | **57.548** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB221 | GPEC-SB221 | GPEC-TP400 | GPEC-TP401 | GPEC-TP402 | GPEC-TP403 | GPEC-TP405 |
| | | | Sample Name | GPEC-SB221 (89-90) | GPEC-XX071212 | GPEC-TP-400 | GPEC-TP-401 | GPEC-TP-402 | GPEC-TP403 | GPEC-TP-405 |
| | | | Start Depth | 89 | 89 | 9.5 | 9.5 | 9.5 | 6.5 | 6.5 |
| | | | End Depth | 90 | 90 | 10 | 10 | 10 | 7 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/12/2012 | 7/12/2012 | 4/19/2016 | 4/19/2016 | 4/20/2016 | 4/27/2016 | 4/22/2016 |
| | | | Parent Sample Code | | GPECSB221 (89-90) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.023 U | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.023 U | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.023 U | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.023 UJ | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.023 UJ | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.023 UJ | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.023 UJ | 0.023 U | 0.039 U | 0.029 U | 0.055 U | 0.024 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.023 U | 0.023 UJ | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.023 U | 0.023 UJ | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9210 J** | **292 J** | **5070** | **2460** | **2000** | **4200** | **8530** |
| Antimony | 7440-36-0 | NE | NE | 1.22 U | **3.38** | **0.436 J** | **133** | **28** | **226** | **0.4 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **5.32 J** | **0.964 J** | **2.19** | **15.6** | **15.8** | **23.2** | **3.09** |
| Barium | 7440-39-3 | 10000 | 820 | **60.2 J** | **35 J** | **34.2** | **107** | **59.7** | **456** | **41.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.566 J** | 0.612 U | 0.607 U | 1.02 U | 0.826 U | 0.882 U | 0.703 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.416 J** | 0.612 U | 0.607 U | **3.19** | **1.12** | **17.4** | 0.703 U |
| Calcium | 7440-70-2 | NE | NE | **2330 J** | **96500 J** | **1540** | **84500** | **107000** | **36000** | **2610** |
| Chromium | 7440-47-3 | NE | NE | **17.3 J** | **0.72 J** | **11.8** | **14** | **14** | **224** | **16.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 UJ | **0.411 J** | 1.15 U | 1.96 U | 1.56 U | 1.63 U | 1.31 U |
| Cobalt | 7440-48-4 | NE | NE | **6.93** | 2.45 U | **4.95** | **2.3** | **2** | **5.96** | **5.03** |
| Copper | 7440-50-8 | 10000 | 1720 | **69.7** | **89.4** | **13.5** | **763** | **234** | **21400 D** | **16.8** |
| Iron | 7439-89-6 | NE | NE | **14300 J** | **829 J** | **13800** | **13700** | **8720** | **57000** | **15800** |
| Lead | 7439-92-1 | 3900 | 450 | **68.9 J** | **170 J** | **4.21** | **2100** | **581** | **28200 D** | **24.2** |
| Magnesium | 7439-95-4 | NE | NE | **2830 J** | **305 J** | **1790** | **533** | **1450** | **3250** | **1790** |
| Manganese | 7439-96-5 | 10000 | 2000 | **275 J** | **7.94 J** | **344** | **89.8** | **80.2** | **2200** | **400** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.015 U | 0.014 U | 0.026 U | **17.9** | **9.14** | **5.09** | **0.041** |
| Nickel | 7440-02-0 | 10000 | 130 | **17.7 J** | **0.659 J** | **9.6** | **16.1** | **9.55** | **203** | **11** |
| Potassium | 7440-09-7 | NE | NE | **1160 J** | **155 J** | **966** | **770** | **539** | **585** | **776** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.45 U | 2.45 U | **0.667** | **6.13** | 0.826 U | **1.77** | **0.575 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.612 U | 0.612 U | 0.607 U | **0.893 J** | **0.349 J** | **18.3** | 0.703 U |
| Sodium | 7440-23-5 | NE | NE | **183 J** | **1310 J** | **153** | **424** | **225** | **711** | **174** |
| Thallium | 7440-28-0 | NE | NE | 0.612 U | 0.612 U | **1.13** | **0.757 J** | **0.382 J** | 0.882 U | 0.703 U |
| Vanadium | 7440-62-2 | NE | NE | **20.7 J** | **0.99 J** | **21.9** | **43.7** | **9.48** | **10.3** | **27** |
| Zinc | 7440-66-6 | 10000 | 2480 | **83.9 J** | **10.5 J** | **27.1** | **735** | **248** | **15100** | **32.4** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.18 U | 1.16 U | 2.9 U | **3.2 J** | 3.9 U | 4.1 U | 3.3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | 1000 U | 1000 U | **44700** | **7210** | **24700** | **2210** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP406 | GPEC-TP407 | GPEC-TP408 | GPEC-TP409 | GPEC-TP412 | GPEC-TP413 |
| | | | Sample Name | GPEC-TP406 | GPEC-TP407 | GPEC-TP408 | GPEC-TP409 | GPEC-TP 412 (9.5-10) | GPEC-TP413 |
| | | | Start Depth | 6.5 | 6.5 | 6.5 | 9 | 9.5 | 9.5 |
| | | | End Depth | 7 | 7 | 7 | 9.5 | 10 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/26/2016 | 4/29/2016 | 5/2/2016 | 5/11/2016 | 5/9/2016 | 5/4/2016 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00592 U | **0.786 D** | 0.00631 UJ | 0.00617 U | 0.602 U | **0.122 J** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | **0.119 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00592 U | **1.74 D** | 0.00631 UJ | 0.00617 U | 0.602 U | **0.193 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 1.23 U | 0.013 UJ | 0.012 U | 1.2 U | **0.666 J** |
| Total BTEX | TBTEX | NE | NE | ND | **2.526** | ND | ND | ND | **1.1** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.043 D** | 1.23 U | 0.032 UJ | 0.031 U | 1.2 U | 0.258 UJ |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.118 U | 12.3 U | 0.126 R | 0.123 U | 12 U | 2.58 R |
| Acrylonitrile | 107-13-1 | NE | NE | 0.118 U | 12.3 U | 0.126 UJ | 0.123 U | 12 U | 2.58 UJ |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Bromoform | 75-25-2 | NE | NE | 0.012 U | 0.615 U | 0.013 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Bromomethane | 74-83-9 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.00886 D** | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 2.46 U | 0.013 R | 0.025 U | 2.41 U | 0.515 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.00559 DJ** | 0.615 U | **0.00837 J** | 0.00617 U | 0.602 U | 0.129 UJ |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.615 U | 0.013 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Chloromethane | 74-87-3 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.012 U | 0.602 U | 0.129 UJ |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 1.23 U | **0.025 J** | 0.012 U | 1.2 U | 0.258 UJ |
| Styrene | 100-42-5 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00592 U | 0.615 U | 0.00631 UJ | 0.00617 U | 0.602 U | 0.129 UJ |
| Total VOCs | TVOC | NE | NE | **0.05745** | **2.526** | **0.03337** | ND | ND | **1.1** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.62** | **1.8** | **0.096** | 0.04 U | **0.125** | **0.49** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.049** | **0.153** | **0.133** | 0.04 U | 0.039 U | **0.056** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.617** | **1.2** | **0.105** | 0.04 U | **0.138** | **0.144** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.519** | **0.67** | **0.669** | 0.04 U | **0.036 J** | **0.061** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **2.79** | **3.25** | **0.516** | 0.04 U | **0.539** | **0.448** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.372** | **1.12** | **0.038 J** | 0.04 U | **0.172** | **0.222** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.06** | **4.33** | 0.042 U | 0.04 U | **0.208** | 0.041 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.148** | **2.76** | **0.067** | 0.04 U | **0.036 J** | **0.084** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.65** | **4.29** | **0.264** | 0.04 U | **0.682** | **0.625** |
| Pyrene | 129-00-0 | 1000 | 1000 | **2.45** | **3.37** | **0.485** | 0.04 U | **0.518** | **0.433** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **1.34** | **1.87** | **0.299** | 0.04 U | **0.2** | **0.165** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.826** | **1.12** | **0.282** | 0.04 U | **0.07** | **0.103** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.697** | **0.936** | **0.227** | 0.04 U | **0.067** | **0.083** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.673** | **0.801** | **0.245** | 0.04 U | **0.091** | **0.101** |
| Chrysene | 218-01-9 | 110 | 1 | **1.38** | **2.28** | **0.32** | 0.04 U | **0.232** | **0.193** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.207** | **0.184** | **0.108** | 0.04 U | 0.039 U | 0.041 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.45** | **0.587** | **0.354** | 0.04 U | **0.041** | **0.06** |
| Total PAHs | TPAH | NE | NE | **14.848** | **30.721** | **4.208** | ND | **3.155** | **3.268** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP406** | **GPEC-TP407** | **GPEC-TP408** | **GPEC-TP409** | **GPEC-TP412** | **GPEC-TP413** |
| **Sample Name** | | | | **GPEC-TP406** | **GPEC-TP407** | **GPEC-TP408** | **GPEC-TP409** | **GPEC-TP 412 (9.5-10)** | **GPEC-TP413** |
| **Start Depth** | | | | **6.5** | **6.5** | **6.5** | **9** | **9.5** | **9.5** |
| **End Depth** | | | | **7** | **7** | **7** | **9.5** | **10** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/26/2016** | **4/29/2016** | **5/2/2016** | **5/11/2016** | **5/9/2016** | **5/4/2016** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | **0.083** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Carbazole | 86-74-8 | NE | NE | **0.126** | **0.491** | **0.05** | 0.04 U | 0.039 U | 0.041 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.107** | **0.472** | 0.042 U | 0.04 U | **0.048** | **0.099** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | 0.039 U | 0.101 U | 0.042 UJ | 0.04 U | 0.039 U | 0.041 UJ |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.101 U | 0.042 U | 0.04 U | 0.039 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | **15.081** | **31.684** | **4.258** | ND | **3.203** | **3.45** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP406** | **GPEC-TP407** | **GPEC-TP408** | **GPEC-TP409** | **GPEC-TP412** | **GPEC-TP413** |
| **Sample Name** | | | | **GPEC-TP406** | **GPEC-TP407** | **GPEC-TP408** | **GPEC-TP409** | **GPEC-TP 412 (9.5-10)** | **GPEC-TP413** |
| **Start Depth** | | | | **6.5** | **6.5** | **6.5** | **9** | **9.5** | **9.5** |
| **End Depth** | | | | **7** | **7** | **7** | **9.5** | **10** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/26/2016** | **4/29/2016** | **5/2/2016** | **5/11/2016** | **5/9/2016** | **5/4/2016** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.046 U | 0.121 U | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | 0.024 U | 0.023 U | 0.023 U | 0.025 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9470** | **5220** | **5450 J** | **1270** | **5130** | **1180 J** |
| Antimony | 7440-36-0 | NE | NE | **4.32** | **16.6** | **2.05** | **0.832 J** | **0.496 J** | **2.34** |
| Arsenic | 7440-38-2 | 16 | 16 | **4.61** | **237** | **49** | **4.66** | **2.32** | **5.96** |
| Barium | 7440-39-3 | 10000 | 820 | **69.8** | **594** | **123** | **76.9** | **30.1** | **34.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.446 J** | 1.64 U | 0.662 U | 1.48 U | 0.641 U | 0.669 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.622 U | **1.22 J** | 0.662 U | 1.48 U | **0.479 J** | 0.669 U |
| Calcium | 7440-70-2 | NE | NE | **4230** | **41000** | **45100** | **2830** | **1500** | **1600** |
| Chromium | 7440-47-3 | NE | NE | **19** | **64.2** | **15.7** | **7.41** | **11.7** | **6.25** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 U | 3.08 U | 1.26 U | 1.23 U | 1.2 U | 1.29 U |
| Cobalt | 7440-48-4 | NE | NE | **7.1** | **3.38** | **3.66** | **2.26** | **6.25** | **3.7** |
| Copper | 7440-50-8 | 10000 | 1720 | **37.5** | **644** | **34.6** | **115** | **11.5** | **115** |
| Iron | 7439-89-6 | NE | NE | **21400** | **13800** | **10500 J** | **4000** | **10300** | **4430 J** |
| Lead | 7439-92-1 | 3900 | 450 | **122** | **1230** | **768** | **45.5** | **7.78** | **52.6** |
| Magnesium | 7439-95-4 | NE | NE | **1960** | **5530** | **5070 J** | **230** | **1790** | **162 J** |
| Manganese | 7439-96-5 | 10000 | 2000 | **503** | **284** | **544** | **519** | **1390** | **179** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.322** | **0.639** | **0.931** | **0.466** | **0.073** | **0.218** |
| Nickel | 7440-02-0 | 10000 | 130 | **14.6** | **16** | **21.1** | **9.74** | **11.4** | **15** |
| Potassium | 7440-09-7 | NE | NE | **859** | **567** | **874 J** | **295** | **628** | **204 J** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.44** | 1.64 U | **4.68** | 1.48 U | 0.641 U | **1.36** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.622 U | 1.64 U | 0.662 U | 1.48 U | 0.641 U | **2.59** |
| Sodium | 7440-23-5 | NE | NE | **160** | **515** | **279 J** | **569** | **116** | **64.4 J** |
| Thallium | 7440-28-0 | NE | NE | **0.303 J** | 1.64 U | 0.662 U | 1.48 U | 0.641 U | 0.669 U |
| Vanadium | 7440-62-2 | NE | NE | **29.7** | **13.6** | **19.7** | **8.25** | **19.3** | **27.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **80.4** | **628** | **184** | **133** | **66.5** | **93.5** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 7.7 U | 3.2 U | 3.1 U | 3 U | 3.2 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **2420** | **75700** | **5890** | **2470** | 1000 U | **3320** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP414** | **GPEC-TP415** | **GPEC-TP415** | **GPEC-TP416** | **GPEC-TP417** | **GPEC-TP418** | **GPEC-TP419** |
| **Sample Name** | | | | **GPEC-TP 414 (7.5-8)** | **GPEC-TP415** | **GPEC-TP815** | **GPEC-TP416** | **GPEC-TP417** | **GPEC-TP418** | **GPEC-TP419** |
| **Start Depth** | | | | **7.5** | **7.5** | **7.5** | **9.5** | **9.5** | **4.5** | **4** |
| **End Depth** | | | | **8** | **8** | **8** | **10** | **10** | **5** | **4.5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/6/2016** | **5/5/2016** | **5/5/2016** | **5/3/2016** | **5/13/2016** | **5/12/2016** | **5/12/2016** |
| **Parent Sample Code** | | | | | | **GPEC-TP415** | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | **0.037 J** | **0.065 J** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | **0.104** | **0.067** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | **0.058 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.245 U | 0.012 UJ | 0.012 UJ | 0.01 UJ | 0.011 U | **0.12 J** | **0.349** |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | **0.261** | **0.539** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.245 U | 0.029 UJ | 0.03 UJ | 0.026 UJ | 0.027 U | 0.13 U | 0.132 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 2.45 U | 0.117 R | 0.118 R | 0.104 R | 0.108 U | 1.3 U | 1.32 U |
| Acrylonitrile | 107-13-1 | NE | NE | 2.45 U | 0.117 UJ | 0.118 UJ | 0.104 UJ | 0.108 U | 1.3 U | 1.32 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Bromoform | 75-25-2 | NE | NE | 0.123 U | 0.012 UJ | 0.0059 UJ | 0.01 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Bromomethane | 74-83-9 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.49 U | 0.012 R | 0.024 R | 0.01 R | 0.022 U | 0.13 U | 0.132 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.123 U | 0.012 UJ | 0.0059 UJ | 0.01 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Chloromethane | 74-87-3 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.123 U | 0.00586 UJ | 0.012 UJ | 0.00522 UJ | 0.011 U | 0.065 U | 0.066 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.245 U | 0.012 UJ | **0.024 J** | **0.015 J** | 0.011 U | 0.13 U | 0.132 U |
| Styrene | 100-42-5 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.123 U | 0.00586 UJ | 0.0059 UJ | 0.00522 UJ | 0.00541 U | 0.065 U | 0.066 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **0.024** | **0.015** | ND | **0.261** | **0.539** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | **1.71 D** | **0.73** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | **0.303 D** | **0.245** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.083** | **2.6 D** | **0.891** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.172** | **5.88 D** | **1.33** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.04 U | 0.038 U | 0.038 U | **0.09** | **0.424** | **14 D** | **2.1** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.03 J** | **1.83 D** | **0.904** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | **0.321 D** | **2.31** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | **0.744 D** | **2.72** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.04 U | 0.038 U | 0.038 U | **0.049** | **0.35** | **10.3 D** | **4.26** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.04 U | 0.038 U | 0.038 U | **0.068** | **0.345** | **13.2 D** | **2.81** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.04 U | 0.038 U | 0.038 U | **0.042** | **0.227** | **6.61 D** | **1.2** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.04 U | 0.038 U | 0.038 U | **0.024 J** | **0.242** | **8.44 D** | **1.46** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.04 U | 0.038 U | 0.038 U | **0.029 J** | **0.239** | **6.51 D** | **1.27** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.193** | **6.67 D** | **0.973** |
| Chrysene | 218-01-9 | 110 | 1 | 0.04 U | 0.038 U | 0.038 U | **0.045** | **0.196** | **6.4 D** | **1.2** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.04** | **1.68 D** | **0.344** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.155** | **5.04 D** | **0.921** |
| Total PAHs | TPAH | NE | NE | ND | ND | ND | **0.347** | **2.696** | **92.238** | **25.668** |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP414 | GPEC-TP415 | GPEC-TP415 | GPEC-TP416 | GPEC-TP417 | GPEC-TP418 | GPEC-TP419 |
| | | | Sample Name | GPEC-TP 414 (7.5-8) | GPEC-TP415 | GPEC-TP815 | GPEC-TP416 | GPEC-TP417 | GPEC-TP418 | GPEC-TP419 |
| | | | Start Depth | 7.5 | 7.5 | 7.5 | 9.5 | 9.5 | 4.5 | 4 |
| | | | End Depth | 8 | 8 | 8 | 10 | 10 | 5 | 4.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/6/2016 | 5/5/2016 | 5/5/2016 | 5/3/2016 | 5/13/2016 | 5/12/2016 | 5/12/2016 |
| | | | Parent Sample Code | | | GPEC-TP415 | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | **0.027 J** | **0.436 D** | **0.151** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | **0.47 D** | **0.264** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Pyridine | 110-86-1 | NE | NE | 0.04 U | 0.038 UJ | 0.038 UJ | 0.034 UJ | 0.035 U | 0.122 U | 0.043 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.038 U | 0.038 U | 0.034 U | 0.035 U | 0.122 U | 0.043 U |
| Total SVOCs | TSVOC | NE | NE | ND | ND | ND | **0.347** | **2.723** | **93.144** | **26.083** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP414 | GPEC-TP415 | GPEC-TP415 | GPEC-TP416 | GPEC-TP417 | GPEC-TP418 | GPEC-TP419 |
| | | | Sample Name | GPEC-TP 414 (7.5-8) | GPEC-TP415 | GPEC-TP815 | GPEC-TP416 | GPEC-TP417 | GPEC-TP418 | GPEC-TP419 |
| | | | Start Depth | 7.5 | 7.5 | 7.5 | 9.5 | 9.5 | 4.5 | 4 |
| | | | End Depth | 8 | 8 | 8 | 10 | 10 | 5 | 4.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/6/2016 | 5/5/2016 | 5/5/2016 | 5/3/2016 | 5/13/2016 | 5/12/2016 | 5/12/2016 |
| | | | Parent Sample Code | | | GPEC-TP415 | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | **0.416** |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.023 U | 0.022 U | 0.022 U | 0.02 U | 0.021 U | 0.024 U | 0.026 U |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | **0.416** |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **914** | **7430 J** | **6290 J** | **3830 J** | **4710** | **6560** | **1580** |
| Antimony | 7440-36-0 | NE | NE | **1.05** | 0.585 U | 0.617 U | 0.549 U | 0.54 U | **5.24** | **0.931** |
| Arsenic | 7440-38-2 | 16 | 16 | **0.654** | **2.1** | **1.54** | **2.36** | **1.69** | **48.5** | **5.32** |
| Barium | 7440-39-3 | 10000 | 820 | **39** | **49.2** | **50** | **34.3** | **16.4** | **842** | **104** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.615 U | **0.532 J** | **0.496 J** | 0.549 U | 0.54 U | **0.376 J** | 0.705 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.615 U | 0.585 U | 0.617 U | 0.549 U | 0.54 U | **0.859** | 0.705 U |
| Calcium | 7440-70-2 | NE | NE | **533** | **2350** | **2110** | **1020** | **776** | **18000** | **903** |
| Chromium | 7440-47-3 | NE | NE | **2.76** | **18.6** | **15.6** | **9.5** | **11.2** | **50.9** | **4.34** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.23 U | 1.17 U | 1.18 U | 1.04 U | 1.08 U | 1.3 U | 1.32 U |
| Cobalt | 7440-48-4 | NE | NE | **0.22 J** | **8.55** | **6.57** | **2.27** | **3.68** | **5.68** | **1.54** |
| Copper | 7440-50-8 | 10000 | 1720 | **7.12** | **23.5** | **18.8** | **11.7** | **6.52** | **244** | **121** |
| Iron | 7439-89-6 | NE | NE | **1060** | **22800 J** | **19400 J** | **8790 J** | **11000** | **21000** | **5690** |
| Lead | 7439-92-1 | 3900 | 450 | **14.5** | **12** | **10.2** | **7.44** | **3.57** | **1020** | **28.4** |
| Magnesium | 7439-95-4 | NE | NE | **132** | **2200 J** | **1790 J** | **1710 J** | **1560** | **2270** | **369** |
| Manganese | 7439-96-5 | 10000 | 2000 | **20.2** | **292** | **236** | **117** | **252** | **451** | **50.2** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.093** | 0.029 U | **0.021 J** | **0.023 J** | **0.016 J** | **1.93** | **0.208** |
| Nickel | 7440-02-0 | 10000 | 130 | **1.31** | **13.5** | **10.5** | **5.83** | **10.3** | **20.1** | **5.53** |
| Potassium | 7440-09-7 | NE | NE | **241** | **1340 J** | **1150 J** | **843 J** | **462** | **778** | **301** |
| Selenium | 7782-49-2 | 6800 | 4 | 0.615 U | **1.46** | **1.44** | **0.712** | **0.936** | **2.07** | **1.88** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.615 U | 0.585 U | 0.617 U | 0.549 U | 0.54 U | **0.346 J** | 0.705 U |
| Sodium | 7440-23-5 | NE | NE | **46.1** | **144 J** | **136 J** | **79.3 J** | **51.7** | **199** | **188** |
| Thallium | 7440-28-0 | NE | NE | **0.833** | **0.825** | 0.617 U | 0.549 U | **0.675** | 0.674 U | 0.705 U |
| Vanadium | 7440-62-2 | NE | NE | **2.4** | **36.9** | **32.4** | **15.3** | **15** | **22.1** | **8.45** |
| Zinc | 7440-66-6 | 10000 | 2480 | **14.2** | **36.1** | **28.4** | **18.1** | **27.9** | **348** | **47.8** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.9 U | 3 U | 2.6 U | 2.7 U | 3.2 U | 3.3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | 1000 U | 1000 U | 1000 U | 1000 U | **30200** | **166000** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Supplemental Inv. | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP420 | GPEC-TP421 | GPEC-SB400 | GPEC-SB400 | GPEC-SB400 | GPEC-SB401 |
| | | | Sample Name | GPEC-TP420 | GPEC-TP421 | GPEC-SB400 | GPEC-SB400 | GPEC-SB400 | GPEC-SB401 |
| | | | Start Depth | 3 | 1 | 5 | 13 | 69 | 5 |
| | | | End Depth | 3.5 | 3 | 5 | 15 | 70 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/12/2016 | 5/10/2017 | 12/15/2016 | 1/3/2017 | 1/3/2017 | 12/21/2016 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **1.19 D** | **1.89 D** | 0.00594 UJ | **3.28 D** | 0.00565 U | 0.00556 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.624 U | **3.58 D** | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.624 U | **166 D** | 0.00594 UJ | **0.608 DJ** | 0.00565 U | 0.00556 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 1.25 U | **255 D** | 0.012 UJ | **2.01 D** | 0.011 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | **1.19** | **426.47** | ND | **5.898** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 1.25 U | 2.52 U | 0.03 UJ | 3.13 U | 0.057 U | 0.028 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 12.5 U | 12.6 U | 0.119 UJ | 15.6 U | 0.113 U | 0.111 U |
| Acrylonitrile | 107-13-1 | NE | NE | 12.5 U | 12.6 U | 0.119 UJ | 15.6 U | 0.113 U | 0.111 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Bromoform | 75-25-2 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Bromomethane | 74-83-9 | NE | NE | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.624 U | 2.52 U | 0.00594 UJ | 3.13 U | 0.011 U | 0.00556 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 1.25 U | 2.52 U | 0.012 UJ | 3.13 U | 0.011 U | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.624 U | 2.52 U | 0.00594 UJ | 3.13 U | 0.011 U | 0.00556 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Chloromethane | 74-87-3 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | **13.6 D** | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | **0.808 D** | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.624 U | 2.52 U | 0.012 UJ | 1.56 U | 0.011 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.624 U | 2.52 U | 0.00594 UJ | 1.56 U | 0.011 U | 0.00556 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 1.25 U | 1.26 U | 0.012 UJ | 1.56 U | 0.011 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.624 U | **7.54 D** | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.624 U | 1.26 U | 0.00594 UJ | **0.598 DJ** | 0.00565 U | 0.00556 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | **99.9 D** | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.624 U | 0.629 U | 0.00594 UJ | 0.781 U | 0.00565 U | 0.00556 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.624 U | 1.26 U | 0.00594 UJ | 1.56 U | 0.00565 U | 0.00556 U |
| Total VOCs | TVOC | NE | NE | **115.498** | **434.01** | ND | **6.496** | ND | ND |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.12** | **0.572 D** | **0.165** | **57.4 D** | 0.037 U | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.158** | **0.729 D** | **0.179** | **6.78 D** | 0.037 U | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.12** | **0.718 D** | **0.302** | **104 D** | 0.037 U | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.221** | **1 D** | **0.657** | **31.5 D** | 0.037 U | 0.036 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.277** | **3.31 D** | **1.92** | **357 D** | 0.037 U | 0.036 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.103** | **0.803 D** | **0.147** | **79.5 D** | 0.037 U | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.227** | **17.5 D** | **0.048** | **28.1 D** | 0.037 U | 0.036 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **2.35** | **195 D** | **0.098** | **62.2 D** | 0.037 U | 0.036 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.568** | **3.05 D** | **0.932** | **504 D** | **0.026 J** | 0.036 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.268** | **3.48 D** | **1.41** | **401 D** | 0.037 U | 0.036 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.166** | **1.74 D** | **1.06** | **162 D** | 0.037 U | 0.036 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.21** | **1.28 D** | **0.943** | **135 D** | 0.037 U | 0.036 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.226** | **1.42 D** | **0.854** | **128 D** | 0.037 U | 0.036 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.184** | **1.23 D** | **0.866** | **135 D** | 0.037 U | 0.036 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.289** | **1.7 D** | **0.923** | **143 D** | 0.037 U | 0.036 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.071** | 0.407 U | **0.293** | **22 D** | 0.037 U | 0.036 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.156** | **0.868 D** | **0.527** | **36.5 D** | 0.037 U | 0.036 U |
| Total PAHs | TPAH | NE | NE | **5.714** | **234.4** | **11.324** | **2392.98** | **0.026** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Supplemental Inv.** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP420** | **GPEC-TP421** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB401** |
| **Sample Name** | | | | **GPEC-TP420** | **GPEC-TP421** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB401** |
| **Start Depth** | | | | **3** | **1** | **5** | **13** | **69** | **5** |
| **End Depth** | | | | **3.5** | **3** | **5** | **15** | **70** | **5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/12/2016** | **5/10/2017** | **12/15/2016** | **1/3/2017** | **1/3/2017** | **12/21/2016** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.041 U | 0.407 U | 0.038 UJ | 1.29 U | 0.037 U | 0.036 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Carbazole | 86-74-8 | NE | NE | **0.049** | 0.407 U | **0.087** | **34.8 D** | 0.037 U | 0.036 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.069** | 0.407 U | **0.1** | **47.8 D** | 0.037 U | 0.036 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.041 U | 0.407 U | 0.038 R | 1.29 U | 0.037 U | 0.036 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.041 U | 0.407 U | 0.038 UJ | 1.29 U | 0.037 U | 0.036 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.041 U | 0.407 U | 0.038 UJ | 1.29 U | 0.037 U | 0.036 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.041 U | 0.407 U | 0.038 UJ | 1.29 U | 0.037 U | 0.036 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Pyridine | 110-86-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.041 U | 0.407 U | 0.038 U | 1.29 U | 0.037 U | 0.036 U |
| Total SVOCs | TSVOC | NE | NE | **5.832** | **234.4** | **11.511** | **2475.58** | **0.026** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Supplemental Inv.** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP420** | **GPEC-TP421** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB401** |
| **Sample Name** | | | | **GPEC-TP420** | **GPEC-TP421** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB400** | **GPEC-SB401** |
| **Start Depth** | | | | **3** | **1** | **5** | **13** | **69** | **5** |
| **End Depth** | | | | **3.5** | **3** | **5** | **15** | **70** | **5** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/12/2016** | **5/10/2017** | **12/15/2016** | **1/3/2017** | **1/3/2017** | **12/21/2016** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.024 U | 0.121 U | 0.0039 U | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.024 U | 0.121 U | 0.0039 U | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.024 U | 0.121 U | 0.0039 U | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.024 U | 0.121 U | 0.0039 U | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.024 U | 0.121 U | 0.0039 U | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.024 U | 0.121 U | **0.02 J** | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.024 U | 0.121 U | **0.019 J** | 0.289 U | 0.022 U | 0.021 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.024 U | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.024 U | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | **0.039** | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.049 U | NA | NA | 0.053 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.0039 U | NA | NA | 0.00426 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.049 U | NA | NA | 0.053 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.019 U | NA | NA | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.019 U | NA | NA | 0.018 U |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.019 U | NA | NA | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **869** | **4890** | **9330** | **3550** | **15700** | **5730** |
| Antimony | 7440-36-0 | NE | NE | **0.714** | **10.6** | **38.1** | **9.1** | 0.596 U | 0.555 U |
| Arsenic | 7440-38-2 | 16 | 16 | **6.59** | **50.5** | **20.4** | **20.5** | **1.91** | **1.13** |
| Barium | 7440-39-3 | 10000 | 820 | **41.9** | **234** | **1820** | **211** | **131** | **34.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.492 J** | **0.546 J** | **0.525 J** | 0.841 U | **0.773** | 0.555 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.474 J** | **2.14** | **2.46** | **4.57** | 0.596 U | 0.555 U |
| Calcium | 7440-70-2 | NE | NE | **325** | **6880** | **16300** | **12900** | **10900** | **2060** |
| Chromium | 7440-47-3 | NE | NE | **2.27** | **19.8** | **113** | **158** | **36.1** | **14.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.25 U | 1.26 U | 1.19 UJ | 1.56 U | 1.13 U | 1.11 U |
| Cobalt | 7440-48-4 | NE | NE | **1.25** | **4.49** | **7.96** | **7.34** | **10.5** | **4.61** |
| Copper | 7440-50-8 | 10000 | 1720 | **111** | **253** | **430** | **4740** | **27** | **9.17** |
| Iron | 7439-89-6 | NE | NE | **1670** | **17500** | **30300** | **74000** | **23900** | **20000** |
| Lead | 7439-92-1 | 3900 | 450 | **15.6** | **499** | **1000** | **503** | **9.12** | **11.3** |
| Magnesium | 7439-95-4 | NE | NE | **206** | **4060** | **3220** | **2820** | **11000** | **1840** |
| Manganese | 7439-96-5 | 10000 | 2000 | **7.75** | **363** | **517** | **1100** | **396** | **354** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.073** | **1.4** | **3.44 J** | **0.614** | 0.025 U | 0.028 U |
| Nickel | 7440-02-0 | 10000 | 130 | **4.21** | **24.4** | **51.9** | **57.7** | **29.6** | **8.17** |
| Potassium | 7440-09-7 | NE | NE | **227** | **717** | **1110** | **1670** | **4840** | **696** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.42** | **6.02** | **1.78** | **1.93** | **1.43** | **0.473 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.665 U | **0.52 J** | **1.08** | **0.784 J** | 0.596 U | 0.555 U |
| Sodium | 7440-23-5 | NE | NE | **812** | **716** | **385** | **633** | **651** | **353** |
| Thallium | 7440-28-0 | NE | NE | 0.665 U | **0.869** | **0.349 J** | **0.369 J** | 0.596 U | **0.775** |
| Vanadium | 7440-62-2 | NE | NE | **7.97** | **27.2** | **35.2** | **12.4** | **39.6** | **23.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **45.5** | **574** | **4480** | **3170** | **59.8** | **21.7** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 3.1 U | 3 U | 3.9 U | 2.8 U | 2.8 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **455000** | **215000** | **33900** | **120000** | **4720** | **1360** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB401 | GPEC-SB401 | GPEC-SB402 | GPEC-SB402 | GPEC-SB402 | GPEC-SB403 | GPEC-SB403 |
| | | | Sample Name | GPEC-SB401 | GPEC-SB401 | GPEC-SB402 | GPEC-SB402 | GPEC-SB402 | GPEC-SB403 | GPEC-SB403 |
| | | | Start Depth | 16 | 69 | 5 | 14 | 69 | 3 | 9 |
| | | | End Depth | 17 | 70 | 5 | 15 | 70 | 4 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/4/2017 | 1/4/2017 | 12/21/2016 | 1/5/2017 | 1/5/2017 | 12/19/2016 | 1/9/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00642 U | 0.00581 U | **0.639** | 0.078 U | 0.00601 U | **0.159** | **0.234** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00642 U | 0.00581 U | **0.022 J** | 0.078 U | 0.00601 U | 0.06 U | **0.155** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00642 U | 0.00581 U | **0.028** | 0.078 U | 0.00601 U | 0.06 U | **0.103** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **0.00514 DJ** | 0.012 U | 0.056 U | **0.198** | 0.012 U | 0.119 U | **0.26** |
| Total BTEX | TBTEX | NE | NE | **0.00514** | ND | **0.689** | **0.198** | ND | **0.159** | **0.752** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.048 DJ** | 0.058 U | 0.056 U | 0.31 U | 0.06 U | 0.119 U | 0.12 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.128 U | 0.116 U | 0.591 U | 1.55 U | 0.12 U | 1.25 U | 0.601 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.128 U | 0.116 U | 0.563 U | 1.55 U | 0.12 U | 1.19 U | 0.601 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Bromoform | 75-25-2 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.00709 DJ** | 0.012 U | 0.056 U | 0.31 U | 0.012 U | 0.119 U | 0.12 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.013 U | 0.012 U | 0.113 U | 0.31 U | 0.012 U | 0.238 U | 0.601 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.00614 DJ** | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00642 U | 0.00581 U | 0.028 U | **0.056 J** | 0.00601 U | 0.06 U | 0.03 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | **0.142** | **0.445** |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.013 U | 0.012 U | 0.056 U | 0.31 U | 0.012 U | 0.119 U | 0.12 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | **0.692** | **0.187** |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.06 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.06 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.013 U | 0.012 U | 0.028 U | 0.155 U | 0.012 U | 0.06 U | 0.12 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.013 U | 0.012 U | 0.028 U | 0.155 U | 0.012 U | 0.06 U | 0.12 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.013 U | 0.012 U | 0.056 U | 0.155 U | 0.012 U | 0.119 U | 0.06 U |
| Styrene | 100-42-5 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00642 U | 0.00581 U | 0.056 U | **0.053 J** | 0.00601 U | 0.119 U | 0.06 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.06 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00642 U | 0.00581 U | 0.028 U | 0.078 U | 0.00601 U | 0.06 U | 0.03 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00642 U | 0.00581 U | 0.056 U | 0.155 U | 0.00601 U | 0.119 U | 0.06 U |
| Total VOCs | TVOC | NE | NE | **0.06637** | ND | **0.689** | **0.307** | ND | **0.993** | **1.384** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.045** | 0.037 U | **0.19** | **27.8 D** | 0.039 U | **0.224** | **6 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.045** | 0.037 U | **0.051** | **2.65 D** | 0.039 U | **0.052** | **0.145 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.085** | 0.037 U | **0.471** | **78.2 D** | 0.039 U | **0.363** | **2.71 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.293** | 0.037 U | **1.13** | **64.9 D** | 0.039 U | **0.385** | **0.438 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.556** | 0.037 U | **2.76** | **234 D** | 0.039 U | **1.17** | **7.55 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.052** | 0.037 U | **0.174** | **48.2 D** | 0.039 U | **0.228** | **6.45 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.179** | 0.037 U | **0.093** | **7.25 D** | 0.039 U | **0.054** | **1.08 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.075** | 0.037 U | **0.166** | **12.6 D** | 0.039 U | **0.285** | **0.472 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.309** | 0.037 U | **1.97** | **287 D** | 0.039 U | **1.04** | **11.6 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.728** | 0.037 U | **2.68** | **254 D** | 0.039 U | **1.41** | **4.81 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.458** | 0.037 U | **1.82** | **130 D** | 0.039 U | **0.711** | **1.63 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.488** | 0.037 U | **1.6** | **102 D** | 0.039 U | **0.538** | **0.862 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.39** | 0.037 U | **1.31** | **94.3 D** | 0.039 U | **0.439** | **0.942 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.247** | 0.037 U | **1.33** | **79.4 D** | 0.039 U | **0.402** | **0.749 D** |
| Chrysene | 218-01-9 | 110 | 1 | **0.384** | 0.037 U | **1.69** | **104 D** | 0.039 U | **0.644** | **1.5 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.135** | 0.037 U | **0.455** | **26.1 D** | 0.039 U | **0.175** | **0.219 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.232** | 0.037 U | **0.945** | **62.2 D** | 0.039 U | **0.304** | **0.437 D** |
| Total PAHs | TPAH | NE | NE | **4.701** | ND | **18.835** | **1614.6** | ND | **8.424** | **47.594** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB401 | GPEC-SB401 | GPEC-SB402 | GPEC-SB402 | GPEC-SB402 | GPEC-SB403 | GPEC-SB403 |
| | | | Sample Name | GPEC-SB401 | GPEC-SB401 | GPEC-SB402 | GPEC-SB402 | GPEC-SB402 | GPEC-SB403 | GPEC-SB403 |
| | | | Start Depth | 16 | 69 | 5 | 14 | 69 | 3 | 9 |
| | | | End Depth | 17 | 70 | 5 | 15 | 70 | 4 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/4/2017 | 1/4/2017 | 12/21/2016 | 1/5/2017 | 1/5/2017 | 12/19/2016 | 1/9/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Carbazole | 86-74-8 | NE | NE | 0.041 U | 0.037 U | **0.143** | **16.9 D** | 0.039 U | **0.089** | **0.251 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.041 U | 0.037 U | **0.129** | **26.8 D** | 0.039 U | **0.171** | **1.61 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.041 U | 0.037 U | 0.037 U | **0.558 D** | 0.039 U | 0.039 U | 0.116 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Pyridine | 110-86-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.041 U | 0.037 U | 0.037 U | 0.5 U | 0.039 U | 0.039 U | 0.116 U |
| Total SVOCs | TSVOC | NE | NE | **4.701** | ND | **19.107** | **1658.858** | ND | **8.684** | **49.455** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB401** | **GPEC-SB401** | **GPEC-SB402** | **GPEC-SB402** | **GPEC-SB402** | **GPEC-SB403** | **GPEC-SB403** |
| **Sample Name** | | | | **GPEC-SB401** | **GPEC-SB401** | **GPEC-SB402** | **GPEC-SB402** | **GPEC-SB402** | **GPEC-SB403** | **GPEC-SB403** |
| **Start Depth** | | | | **16** | **69** | **5** | **14** | **69** | **3** | **9** |
| **End Depth** | | | | **17** | **70** | **5** | **15** | **70** | **4** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **1/4/2017** | **1/4/2017** | **12/21/2016** | **1/5/2017** | **1/5/2017** | **12/19/2016** | **1/9/2017** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.253 U | 0.022 U | 0.022 U | 0.306 U | 0.023 U | 0.023 U | 0.231 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.054 U | NA | NA | 0.058 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00432 U | NA | NA | 0.00466 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.054 U | NA | NA | 0.058 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.018 U | NA | NA | 0.019 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.018 U | NA | NA | 0.019 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.018 U | NA | NA | 0.019 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5060** | **2840** | **8710** | **3930** | **3280** | **9810** | **10200** |
| Antimony | 7440-36-0 | NE | NE | **20.6** | 0.58 U | **12.3** | **29.7** | 0.628 U | **0.917** | **2.08** |
| Arsenic | 7440-38-2 | 16 | 16 | **9.25** | **1.2** | **8.44** | **28.7** | **1.1** | **22.8** | **10.9** |
| Barium | 7440-39-3 | 10000 | 820 | **190** | **16.5** | **174** | **115** | **18.2** | **80.9** | **975** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.341 J** | 0.58 U | **0.492 J** | 0.818 U | 0.628 U | **0.486 J** | **0.457 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.983** | 0.58 U | **0.697** | **9.9** | 0.628 U | **7.33** | **5.79** |
| Calcium | 7440-70-2 | NE | NE | **13800** | **1050** | **3040** | **13000** | **1190** | **5500** | **26300** |
| Chromium | 7440-47-3 | NE | NE | **21.3** | **7.12** | **34.6** | **23** | **10.5** | **30.3** | **28.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.28 U | 1.16 U | 1.13 U | 1.55 U | 1.2 U | 1.19 U | 1.2 U |
| Cobalt | 7440-48-4 | NE | NE | **5.28** | **2.99** | **7.13** | **5.67** | **3.16** | **6.01** | **8.22** |
| Copper | 7440-50-8 | 10000 | 1720 | **66.3** | **6.65** | **106** | **269** | **7.27** | **28.9** | **93.7** |
| Iron | 7439-89-6 | NE | NE | **36600** | **8960** | **25600** | **64200** | **10700** | **24200** | **34900** |
| Lead | 7439-92-1 | 3900 | 450 | **325** | **2.01** | **1010** | **471** | **3.84** | **173** | **1140** |
| Magnesium | 7439-95-4 | NE | NE | **4280** | **1360** | **2510** | **2690** | **1620** | **2220** | **12500** |
| Manganese | 7439-96-5 | 10000 | 2000 | **384** | **74.4** | **349** | **340** | **107** | **480** | **1060** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.285** | 0.029 U | **2.93** | **0.691** | 0.028 U | **0.488** | **0.22** |
| Nickel | 7440-02-0 | 10000 | 130 | **13.6** | **6.18** | **14.7** | **19.5** | **7.9** | **12.5** | **26.1** |
| Potassium | 7440-09-7 | NE | NE | **762** | **675** | **1390** | **660** | **782** | **1080** | **1940** |
| Selenium | 7782-49-2 | 6800 | 4 | 0.661 U | 0.58 U | **0.844** | **2.05** | 0.628 U | **1.12** | **1.25** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.661 U | 0.58 U | **0.269 J** | **0.627 J** | 0.628 U | 0.641 U | **5.09** |
| Sodium | 7440-23-5 | NE | NE | **547** | **147** | **234** | **4030** | **173** | **126** | **432** |
| Thallium | 7440-28-0 | NE | NE | 0.661 U | **1.72** | 0.606 U | 0.818 U | 0.628 U | **0.282 J** | **0.256 J** |
| Vanadium | 7440-62-2 | NE | NE | **28.8** | **13.2** | **31** | **12.9** | **13.1** | **32.9** | **19.3** |
| Zinc | 7440-66-6 | 10000 | 2480 | **435** | **24.2** | **363** | **6010** | **35.6** | **1310** | **1770** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.2 U | 2.9 U | 2.8 U | 3.9 U | 3 U | 3 U | 3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **57100** | 1000 U | **42300** | **2570** | 1000 U | **11800** | **31100** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB403** | **GPEC-SB404** | **GPEC-SB404** | **GPEC-SB404** | **GPEC-SB405** | **GPEC-SB405** |
| **Sample Name** | | | | **GPEC-SB403** | **GPEC-SB404** | **GPEC-SB404** | **GPEC-SB404** | **GPEC-SB405** | **GPEC-SB405** |
| **Start Depth** | | | | **69** | **5** | **8** | **69** | **5** | **9** |
| **End Depth** | | | | **70** | **5** | **9** | **70** | **5** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **1/9/2017** | **12/20/2016** | **1/20/2017** | **1/20/2017** | **12/20/2016** | **1/6/2017** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00594 U | **0.11** | 0.00791 U | 0.00583 U | **0.317** | **0.526** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00594 U | **0.127** | 0.00791 U | 0.00583 U | **0.073** | **0.046 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00594 U | **0.072** | 0.00791 U | 0.00583 U | **0.079** | **0.341** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | **0.186** | 0.016 U | 0.012 U | **0.204** | **0.272** |
| Total BTEX | TBTEX | NE | NE | ND | **0.495** | ND | ND | **0.673** | **1.185** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.059 U | 0.061 U | 0.079 U | 0.058 U | 0.078 U | 0.304 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.119 U | 0.64 U | 0.158 U | 0.117 U | 0.816 U | 1.52 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.119 U | 0.61 U | 0.158 U | 0.117 U | 0.778 U | 1.52 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Bromoform | 75-25-2 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.061 U | 0.016 U | 0.012 U | 0.078 U | 0.304 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 0.122 U | 0.016 U | 0.012 U | 0.156 U | 0.304 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.061 U | 0.016 U | 0.012 U | 0.078 U | 0.304 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.031 U | 0.016 U | 0.012 U | 0.039 U | 0.152 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.031 U | 0.016 U | 0.012 U | 0.039 U | 0.152 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.061 U | 0.016 U | 0.012 U | 0.078 U | 0.152 U |
| Styrene | 100-42-5 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | **0.02 D** | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00594 U | 0.031 U | 0.00791 U | 0.00583 U | 0.039 U | 0.076 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00594 U | 0.061 U | 0.00791 U | 0.00583 U | 0.078 U | 0.152 U |
| Total VOCs | TVOC | NE | NE | **0.02** | **0.495** | ND | ND | **0.673** | **1.185** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.039 U | **0.054** | **0.152** | 0.038 U | **0.165** | **0.712 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.039 U | **0.161** | **0.132** | 0.038 U | **0.396** | **1.48 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.039 U | **0.345** | **0.165** | 0.038 U | **0.742** | **2.11 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.039 U | **0.852** | **0.64** | 0.038 U | **2.08** | **9.56 D** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.039 U | **0.047** | **0.072** | 0.038 U | **0.185** | **0.989 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.039 U | **0.059** | 0.051 U | 0.038 U | 0.05 U | **0.578 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.043** | **0.154** | **0.449** | 0.038 U | **0.452** | **5.25 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.039 U | **0.338** | **0.433** | 0.038 U | **1.48** | **8.43 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.039 U | **1.11** | **0.911** | 0.038 U | **1.89** | **10.3 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.039 U | **0.61** | **0.659** | 0.038 U | **1.23** | **5.05 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.039 U | **0.493** | **0.294** | 0.038 U | **1.01** | **4.52 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.039 U | **0.534** | **0.244** | 0.038 U | **1.02** | **4.63 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.039 U | **0.362** | **0.26** | 0.038 U | **0.765** | **2.98 D** |
| Chrysene | 218-01-9 | 110 | 1 | 0.039 U | **0.605** | **0.788** | 0.038 U | **1.13** | **4.44 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.039 U | **0.131** | **0.036 J** | 0.038 U | **0.272** | **0.647 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.039 U | **0.298** | **0.152** | 0.038 U | **0.617** | **1.84 D** |
| Total PAHs | TPAH | NE | NE | **0.043** | **6.153** | **5.387** | ND | **13.434** | **63.516** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB403 | GPEC-SB404 | GPEC-SB404 | GPEC-SB404 | GPEC-SB405 | GPEC-SB405 |
| | | | Sample Name | GPEC-SB403 | GPEC-SB404 | GPEC-SB404 | GPEC-SB404 | GPEC-SB405 | GPEC-SB405 |
| | | | Start Depth | 69 | 5 | 8 | 69 | 5 | 9 |
| | | | End Depth | 70 | 5 | 9 | 70 | 5 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/9/2017 | 12/20/2016 | 1/20/2017 | 1/20/2017 | 12/20/2016 | 1/6/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.039 U | **0.068** | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Carbazole | 86-74-8 | NE | NE | 0.039 U | **0.039 J** | 0.051 U | 0.038 U | **0.118** | **0.498 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.039 U | **0.051** | **0.052** | 0.038 U | **0.056** | **0.534 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Pyridine | 110-86-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.04 U | 0.051 U | 0.038 U | 0.05 U | 0.1 U |
| Total SVOCs | TSVOC | NE | NE | **0.043** | **6.311** | **5.439** | ND | **13.608** | **64.548** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| Investigation Phase | | | | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-SB403 | GPEC-SB404 | GPEC-SB404 | GPEC-SB404 | GPEC-SB405 | GPEC-SB405 |
| Sample Name | | | | GPEC-SB403 | GPEC-SB404 | GPEC-SB404 | GPEC-SB404 | GPEC-SB405 | GPEC-SB405 |
| Start Depth | | | | 69 | 5 | 8 | 69 | 5 | 9 |
| End Depth | | | | 70 | 5 | 9 | 70 | 5 | 10 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 1/9/2017 | 12/20/2016 | 1/20/2017 | 1/20/2017 | 12/20/2016 | 1/6/2017 |
| Parent Sample Code | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.024 U | 0.03 U | 0.022 U | 0.03 U | 0.028 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.059 U | NA | NA | 0.074 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00472 U | NA | NA | 0.00592 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.059 U | NA | NA | 0.074 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.02 U | NA | NA | 0.025 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.02 U | NA | NA | 0.025 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.02 U | NA | NA | 0.025 U | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3340** | **5010** | **5450** | **2470** | **9220** | **13400** |
| Antimony | 7440-36-0 | NE | NE | 0.595 U | **1.25** | **1.81** | 0.585 U | **5.3** | **4.85** |
| Arsenic | 7440-38-2 | 16 | 16 | **0.655** | **8** | **4.48** | **0.861** | **16.8** | **15** |
| Barium | 7440-39-3 | 10000 | 820 | **11.9** | **115** | **116** | **8.95** | **183** | **361** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.595 U | 0.641 U | 0.87 U | 0.585 U | **0.576 J** | **0.514 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.595 U | 0.641 U | 0.87 U | 0.585 U | **0.678 J** | **7.03** |
| Calcium | 7440-70-2 | NE | NE | **11400** | **21800** | **24600** | **7990** | **8030** | **10600** |
| Chromium | 7440-47-3 | NE | NE | **8.42** | **13.1** | **12.2** | **5.86** | **22.5** | **37.9** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 1.22 U | 1.58 U | 1.17 U | 1.56 U | 1.52 U |
| Cobalt | 7440-48-4 | NE | NE | **3.25** | **3.91** | **3.75** | **2.29** | **7.16** | **6.98** |
| Copper | 7440-50-8 | 10000 | 1720 | **8.82** | **72.1** | **293** | **5.72** | **97.2** | **103** |
| Iron | 7439-89-6 | NE | NE | **8960** | **11700** | **10600** | **6620** | **18800** | **62300** |
| Lead | 7439-92-1 | 3900 | 450 | **1.69** | **175** | **150** | **1.57** | **326** | **687** |
| Magnesium | 7439-95-4 | NE | NE | **6530** | **2370** | **2080** | **4540** | **2490** | **2810** |
| Manganese | 7439-96-5 | 10000 | 2000 | **142** | **243** | **275** | **126** | **428** | **444** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.03 U | **0.256** | **0.429** | 0.029 U | **6.49** | **15.6** |
| Nickel | 7440-02-0 | 10000 | 130 | **8.4** | **13.4** | **13.6** | **5.38** | **20.8** | **19.1** |
| Potassium | 7440-09-7 | NE | NE | **476** | **765** | **827** | **412** | **902** | **1260** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.698** | 0.641 U | 0.87 U | 0.585 U | 0.802 U | **2.18** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.595 U | 0.641 U | 0.87 U | 0.585 U | 0.802 U | 0.792 U |
| Sodium | 7440-23-5 | NE | NE | **203** | **108** | **267** | **137** | **79.4** | **260** |
| Thallium | 7440-28-0 | NE | NE | **0.817** | 0.641 U | 0.87 U | **0.548 J** | 0.802 U | 0.792 U |
| Vanadium | 7440-62-2 | NE | NE | **15.7** | **15.2** | **15.4** | **10.1** | **28.2** | **33.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **14.3** | **137** | **154** | **11.6** | **460** | **2800** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3 U | 4 U | 2.9 U | 3.9 U | 3.8 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **3140** | **51200** | **38300** | **3380** | **32200** | **33100** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB405 | GPEC-SB406 | GPEC-SB406 | GPEC-SB406 | GPEC-SB407 | GPEC-SB408 | GPEC-SB408 |
| | | | Sample Name | GPEC-SB405 | GPEC-SB406 | GPEC-SB406 | GPEC-SB406 | GPEC-SB-407 | GPEC-SB408 | GPEC-SB408 |
| | | | Start Depth | 69 | 5 | 12 | 69 | 5 | 5 | 9 |
| | | | End Depth | 70 | 5 | 13 | 70 | 5 | 5 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/6/2017 | 12/19/2016 | 1/18/2017 | 1/18/2017 | 12/19/2016 | 12/19/2016 | 1/20/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.011 UJ | 0.012 U | 0.012 U | 0.015 UJ | 0.011 UJ | 0.011 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.059 U | 0.028 UJ | **0.085 D** | 0.061 U | 0.038 UJ | 0.027 UJ | 0.057 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.118 U | 0.112 UJ | 0.117 U | 0.121 U | 0.15 UJ | 0.109 UJ | 0.114 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.118 U | 0.112 UJ | 0.117 U | 0.121 U | 0.15 UJ | 0.109 UJ | 0.114 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Bromoform | 75-25-2 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.00562 UJ | 0.012 U | 0.012 U | 0.00749 UJ | 0.00543 UJ | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 0.011 UJ | 0.012 U | 0.012 U | 0.015 UJ | 0.011 UJ | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.00562 UJ | 0.012 U | 0.012 U | 0.00749 UJ | 0.00543 UJ | 0.011 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.011 UJ | 0.012 U | 0.012 U | 0.015 UJ | 0.011 UJ | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.00562 UJ | 0.012 U | 0.012 U | 0.00749 UJ | 0.00543 UJ | 0.011 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.011 UJ | 0.012 U | 0.012 U | 0.015 UJ | 0.011 UJ | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | **0.00212 J** | 0.0057 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | **0.00627 J** | 0.0057 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00588 U | 0.00562 UJ | 0.00585 U | 0.00605 U | 0.00749 UJ | 0.00543 UJ | 0.0057 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **0.085** | ND | ND | **0.00839** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.039 U | **1.25** | **0.083** | 0.038 U | **0.06** | **0.477** | 0.038 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.039 U | 0.184 U | **0.037 J** | 0.038 U | **0.989** | **6.29** | **0.06** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.039 U | **2.21** | **0.249** | 0.038 U | **0.505** | **4.43** | **0.043** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.039 U | **1.59** | **0.458** | 0.038 U | **0.605** | **3.18** | **0.137** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.039 U | **9.06** | **1.5** | 0.038 U | **0.953** | **38.1** | **0.384** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.039 U | **1.05** | **0.076** | 0.038 U | **0.087** | **1.55** | 0.038 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.039 U | **0.235** | 0.038 U | 0.038 U | **0.105** | **0.3 J** | 0.038 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.039 U | **0.436** | **0.028 J** | 0.038 U | **0.095** | **1.22** | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.039 U | **8.24** | **0.847** | 0.038 U | **0.533** | **10.9** | **0.128** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.039 U | **6.12** | **1.34** | 0.038 U | **4.34 J** | **24.8** | **0.373** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.039 U | **3.29** | **0.839** | 0.038 U | **0.753** | **21** | **0.275** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.039 U | **2.48** | **0.695** | 0.038 U | **1.56** | **15.7** | **0.237** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.039 U | **2.12** | **0.669** | 0.038 U | **0.958** | **17.1** | **0.186** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.039 U | **2.7** | **0.589** | 0.038 U | **1.17** | **15.5** | **0.239** |
| Chrysene | 218-01-9 | 110 | 1 | 0.039 U | **2.67** | **0.823** | 0.038 U | **1.47** | **15.9** | **0.231** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.039 U | **0.553** | **0.179** | 0.038 U | 0.05 U | **2.4** | **0.056** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.039 U | **1.25** | **0.411** | 0.038 U | **0.46** | **4.34** | **0.138** |
| Total PAHs | TPAH | NE | NE | ND | **45.254** | **8.823** | ND | **14.643** | **183.187** | **2.487** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** | **Area 7** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB405** | **GPEC-SB406** | **GPEC-SB406** | **GPEC-SB406** | **GPEC-SB407** | **GPEC-SB408** | **GPEC-SB408** |
| **Sample Name** | | | | **GPEC-SB405** | **GPEC-SB406** | **GPEC-SB406** | **GPEC-SB406** | **GPEC-SB-407** | **GPEC-SB408** | **GPEC-SB408** |
| **Start Depth** | | | | **69** | **5** | **12** | **69** | **5** | **5** | **9** |
| **End Depth** | | | | **70** | **5** | **13** | **70** | **5** | **5** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **1/6/2017** | **12/19/2016** | **1/18/2017** | **1/18/2017** | **12/19/2016** | **12/19/2016** | **1/20/2017** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.039 U | 0.184 UJ | 0.038 U | 0.038 U | 0.05 R | 0.345 UJ | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | 0.039 U | **0.899** | **0.063** | 0.038 U | 0.05 U | **0.41** | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.039 U | **0.693** | **0.046** | 0.038 U | 0.05 U | **0.528** | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 R | 0.345 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.039 U | 0.184 R | 0.038 U | 0.038 U | 0.05 R | 0.345 R | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 UJ | 0.345 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 R | 0.345 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.039 U | 0.184 UJ | 0.038 U | 0.038 U | 0.05 UJ | 0.345 UJ | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.039 U | 0.184 UJ | 0.038 U | 0.038 U | 0.05 UJ | 0.345 UJ | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.039 U | 0.184 UJ | 0.038 U | 0.038 U | 0.05 UJ | 0.345 UJ | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.039 U | 0.184 U | 0.038 U | 0.038 U | 0.05 U | 0.345 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | ND | **46.846** | **8.932** | ND | **14.643** | **184.125** | **2.487** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| **Investigation Phase** | | | | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| **Location Name** | | | | GPEC-SB405 | GPEC-SB406 | GPEC-SB406 | GPEC-SB406 | GPEC-SB-407 | GPEC-SB408 | GPEC-SB408 |
| **Sample Name** | | | | GPEC-SB405 | GPEC-SB406 | GPEC-SB406 | GPEC-SB406 | GPEC-SB-407 | GPEC-SB408 | GPEC-SB408 |
| **Start Depth** | | | | 69 | 5 | 12 | 69 | 5 | 5 | 9 |
| **End Depth** | | | | 70 | 5 | 13 | 70 | 5 | 5 | 10 |
| **Depth Unit** | | | | ft | ft | ft | ft | ft | ft | ft |
| **Sample Date** | | | | 1/6/2017 | 12/19/2016 | 1/18/2017 | 1/18/2017 | 12/19/2016 | 12/19/2016 | 1/20/2017 |
| **Parent Sample Code** | | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.00186 U | 0.023 U | 0.023 U | 0.025 U | 0.00889 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.00465 U | NA | NA | 0.307 U | 0.045 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.000372 U | NA | NA | 0.025 U | 0.00356 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.00465 U | NA | NA | 0.307 U | 0.045 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.018 U | NA | NA | 0.025 U | 0.018 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.018 U | NA | NA | 0.025 U | 0.018 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.018 U | NA | NA | 0.025 U | 0.018 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3450** | **9820** | **5680** | **2220** | **8520** | **6300** | **12300** |
| Antimony | 7440-36-0 | NE | NE | 0.622 U | **1.54** | **1.19** | 0.62 U | **7.86** | **5.06** | **0.401 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **0.64** | **7.08** | **4.41** | **0.493 J** | **35.7** | **6.31** | **2.98** |
| Barium | 7440-39-3 | 10000 | 820 | **16.6** | **70.5** | **60.3** | **9.96** | **101** | **63.9** | **27.7** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.622 U | **0.552 J** | 0.592 U | 0.62 U | **0.682 J** | **0.33 J** | **0.421 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.622 U | 0.606 U | 0.592 U | 0.62 U | **1.13** | **0.414 J** | 0.596 U |
| Calcium | 7440-70-2 | NE | NE | **1680** | **2820** | **3990** | **13900** | **2730** | **1940** | **1180** |
| Chromium | 7440-47-3 | NE | NE | **8.58** | **17.1** | **11.4** | **5.79** | **22.4** | **14.8** | **18.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 U | 1.12 UJ | 1.17 U | 1.21 U | 1.5 UJ | 1.09 UJ | 1.14 U |
| Cobalt | 7440-48-4 | NE | NE | **3.04** | **6.56** | **4.25** | **2.2** | **7.96** | **3.9** | **3.11** |
| Copper | 7440-50-8 | 10000 | 1720 | **5.4** | **38.8** | **44.3** | **5.44** | **188** | **68.9** | **15.5** |
| Iron | 7439-89-6 | NE | NE | **10000** | **14400** | **11300** | **6160** | **19500** | **11200** | **15800** |
| Lead | 7439-92-1 | 3900 | 450 | **3.86** | **150** | **167** | **1.8** | **287** | **90.1** | **7.75** |
| Magnesium | 7439-95-4 | NE | NE | **1960** | **2000** | **1940** | **6660** | **2720** | **1770** | **2080** |
| Manganese | 7439-96-5 | 10000 | 2000 | **140** | **188** | **182** | **144** | **269** | **179** | **115** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.026 U | **0.397** | **0.543** | 0.03 U | **0.712** | **1.15 J** | **0.158** |
| Nickel | 7440-02-0 | 10000 | 130 | **7.32** | **19.2** | **11.5** | **5.45** | **27.1** | **10.8** | **10.6** |
| Potassium | 7440-09-7 | NE | NE | **665** | **741** | **779** | **418** | **1210** | **599** | **632** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.535 J** | **2.07** | **0.653** | 0.62 U | **33.7** | **1.46** | 0.596 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.622 U | 0.606 U | 0.592 U | 0.62 U | **0.975** | 0.561 U | 0.596 U |
| Sodium | 7440-23-5 | NE | NE | **168** | **433** | **592** | **147** | **250** | **923** | **1490** |
| Thallium | 7440-28-0 | NE | NE | 0.622 U | 0.606 U | 0.592 U | 0.62 U | **6.37** | 0.561 U | 0.596 U |
| Vanadium | 7440-62-2 | NE | NE | **13.1** | **26.8** | **16.9** | **11** | **46.3** | **20** | **25.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **25** | **101** | **83** | **9.92** | **453** | **116** | **30.1** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.8 U | 2.9 U | 3 U | 3.7 U | 2.7 U | 2.9 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **2630** | **31000** | **20700** | **1660** | **59200** | **138000** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB408 | GPEC-SB408 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 |
| | | | Sample Name | GPEC-SB-XX012017 | GPEC-SB408 | GPEC-SB409 | GPEC-SBXX | GPEC-SB409 | GPEC-SB409 |
| | | | Start Depth | 9 | 69 | 1 | 1 | 11 | 69 |
| | | | End Depth | 10 | 70 | 2.5 | 2.5 | 12 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/20/2017 | 1/24/2017 | 12/16/2016 | 12/16/2016 | 1/10/2017 | 1/11/2017 |
| | | | Parent Sample Code | GPEC-SB408 9-10 | | | GPEC-SB409 (1-2.5) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00566 U | 0.00567 U | **0.124 J** | **0.115 J** | 3.28 U | 0.00582 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00566 U | 0.00567 U | **0.252 J** | **0.248 J** | 3.28 U | 0.00582 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00566 U | 0.00567 U | **0.441 J** | **0.419 J** | **70.1 D** | 0.00582 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | 0.011 U | **0.731 J** | **0.767 J** | **51 D** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | **1.548** | **1.549** | **121.1** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.057 U | 0.057 U | 0.23 UJ | 0.228 UJ | 13.1 U | 0.058 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.113 U | 0.113 U | 2.42 UJ | 2.39 UJ | 65.5 U | 0.116 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.113 U | 0.113 U | 2.3 UJ | 2.28 UJ | 65.5 U | 0.116 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Bromoform | 75-25-2 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.011 U | 0.23 UJ | 0.228 UJ | 13.1 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.011 U | 0.011 U | 0.46 R | 0.456 R | 65.5 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 6.55 U | 0.00582 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.011 U | 0.011 U | 0.23 UJ | 0.228 UJ | 13.1 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 6.55 U | 0.00582 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 6.55 U | 0.00582 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.011 U | 0.115 UJ | 0.114 UJ | 13.1 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.011 U | 0.011 U | 0.115 UJ | 0.114 UJ | 13.1 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.016 CD** | 0.011 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 6.55 U | 0.00582 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00566 U | 0.00567 U | 0.115 UJ | 0.114 UJ | 3.28 U | 0.00582 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00566 U | 0.00567 U | 0.23 UJ | 0.228 UJ | 6.55 U | 0.00582 U |
| Total VOCs | TVOC | NE | NE | **0.016** | ND | **1.548** | **1.549** | **121.1** | ND |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | 0.037 U | **0.206** | **0.316** | **169 D** | 0.038 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.068** | 0.037 U | **0.313** | **0.51** | **27.2 D** | 0.038 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.053** | 0.037 U | **0.413** | **0.51** | **92.4 D** | 0.038 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.15** | 0.037 U | **2.58** | **1.68** | **18.9 D** | 0.038 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.454** | 0.037 U | **5.06** | **4.49** | **134 D** | 0.038 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | 0.037 U | **0.343** | **0.33** | **167 D** | 0.038 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | 0.037 U | **1.13** | **0.928** | **650 D** | 0.038 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | 0.037 U | **1.23** | **1.07** | **966 D** | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.152** | 0.037 U | **1.73** | **1.81** | **468 D** | **0.064** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.401** | 0.037 U | **3.99** | **3.26** | **204 D** | **0.033 J** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.317** | 0.037 U | **3.66** | **2.63** | **73.7 D** | 0.038 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.263** | 0.037 U | **3.16** | **2.54** | **49.3 D** | 0.038 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.243** | 0.037 U | **3.59** | **3.32** | **21.3 D** | 0.038 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.248** | 0.037 U | **2.88** | **2.45** | **27.3 D** | 0.038 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.261** | 0.037 U | **3.84** | **2.66** | **61.1 D** | 0.038 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.054** | 0.037 U | **1.07** | **0.738** | **6.31 D** | 0.038 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.141** | 0.037 U | **2.12** | **1.62** | **15 D** | 0.038 U |
| Total PAHs | TPAH | NE | NE | **2.805** | ND | **37.315** | **30.862** | **3150.51** | **0.097** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB408 | GPEC-SB408 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 |
| | | | Sample Name | GPEC-SB-XX012017 | GPEC-SB408 | GPEC-SB409 | GPEC-SBXX | GPEC-SB409 | GPEC-SB409 |
| | | | Start Depth | 9 | 69 | 1 | 1 | 11 | 69 |
| | | | End Depth | 10 | 70 | 2.5 | 2.5 | 12 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/20/2017 | 1/24/2017 | 12/16/2016 | 12/16/2016 | 1/10/2017 | 1/11/2017 |
| | | | Parent Sample Code | GPEC-SB408 9-10 | | | GPEC-SB409 (1-2.5) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.037 U | 0.038 UJ | 0.037 UJ | 2.17 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.037 U | **0.055** | **0.049** | 2.17 U | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | 0.037 U | **0.094** | **0.152** | **2.75 D** | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | 0.037 U | **0.127** | **0.138** | **28.4 D** | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.037 U | 0.038 R | 0.037 R | 2.17 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.038 UJ | 0.037 UJ | 2.17 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.037 U | 0.038 UJ | 0.037 UJ | 2.17 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.037 U | 0.038 UJ | 0.037 UJ | 2.17 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.037 U | 0.038 U | 0.037 U | 2.17 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **2.805** | ND | **37.591** | **31.201** | **3181.66** | **0.097** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB408 | GPEC-SB408 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 | GPEC-SB409 |
| | | | Sample Name | GPEC-SB-XX012017 | GPEC-SB408 | GPEC-SB409 | GPEC-SBXX | GPEC-SB409 | GPEC-SB409 |
| | | | Start Depth | 9 | 69 | 1 | 1 | 11 | 69 |
| | | | End Depth | 10 | 70 | 2.5 | 2.5 | 12 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/20/2017 | 1/24/2017 | 12/16/2016 | 12/16/2016 | 1/10/2017 | 1/11/2017 |
| | | | Parent Sample Code | GPEC-SB408 9-10 | | | GPEC-SB409 (1-2.5) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.022 U | **0.034** | **0.034** | 0.485 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.022 U | 0.00955 U | 0.00946 U | 0.485 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | **0.034** | **0.034** | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.048 U | 0.047 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00382 U | **0.00259 J** | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00382 U | 0.00378 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.048 U | 0.047 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.019 U | 0.019 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.019 U | 0.019 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.019 U | 0.019 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **11800** | **3530** | **6980** | **6680** | **2830** | **3000** |
| Antimony | 7440-36-0 | NE | NE | **0.277 J** | 0.593 U | **7.54** | **6.5** | **6.33** | 0.622 U |
| Arsenic | 7440-38-2 | 16 | 16 | **2.76** | **0.477 J** | **16.8** | **22** | **11.7** | **0.407 J** |
| Barium | 7440-39-3 | 10000 | 820 | **28.9** | **26.7** | **159** | **169** | **47.4** | **15.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.405 J** | 0.593 U | **0.527 J** | **0.522 J** | 0.679 U | 0.622 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.606 U | 0.593 U | **10.3** | **9.32** | **0.728** | 0.622 U |
| Calcium | 7440-70-2 | NE | NE | **1280** | **6600** | **12500** | **9030** | **1620** | **1300** |
| Chromium | 7440-47-3 | NE | NE | **17.4** | **6.06** | **22.8** | **20.9** | **9.75** | **7.81** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.13 U | 1.13 U | 1.15 UJ | 1.14 UJ | 1.31 U | 1.16 U |
| Cobalt | 7440-48-4 | NE | NE | **2.92** | **3.56** | **5.84** | **5.85** | **3.38** | **2.92** |
| Copper | 7440-50-8 | 10000 | 1720 | **14.6** | **6.58** | **234** | **226** | **208** | **11.9** |
| Iron | 7439-89-6 | NE | NE | **15000** | **8520** | **15700** | **18300** | **11200** | **7370** |
| Lead | 7439-92-1 | 3900 | 450 | **7.81** | **1.87** | **436** | **408** | **87.3** | **2.51** |
| Magnesium | 7439-95-4 | NE | NE | **2000** | **4550** | **5560 J** | **2280 J** | **589** | **1620** |
| Manganese | 7439-96-5 | 10000 | 2000 | **104** | **201** | **943 J** | **1980 J** | **94.7** | **66.9** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.086** | 0.027 U | **1.16 J** | **1.05 J** | **0.383** | 0.027 U |
| Nickel | 7440-02-0 | 10000 | 130 | **10.2** | **6.51** | **21.1** | **23.5** | **27** | **7.47** |
| Potassium | 7440-09-7 | NE | NE | **645** | **719** | **839** | **732** | **373** | **479** |
| Selenium | 7782-49-2 | 6800 | 4 | 0.606 U | 0.593 U | 0.62 U | **0.922** | **2.69** | 0.622 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.606 U | 0.593 U | **0.497 J** | **0.602 J** | **4.04** | 0.622 U |
| Sodium | 7440-23-5 | NE | NE | **1620** | **133** | **153** | **130** | **96.9** | **137** |
| Thallium | 7440-28-0 | NE | NE | 0.606 U | 0.593 U | **0.34 J** | **0.303 J** | **0.294 J** | 0.622 U |
| Vanadium | 7440-62-2 | NE | NE | **24.5** | **9.96** | **35.3** | **32.7** | **18** | **11.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **26.9** | **21** | **1040** | **1080** | **202** | **16.5** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.8 U | 2.9 U | 2.8 U | 3.3 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **1140** | **5970** | **53700** | **36400** | **82300** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 |
| | | | Sample Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SBXX011217 | GPEC-SB411 |
| | | | Start Depth | 4 | 11 | 69 | 2 | 10.5 | 10.5 | 69 |
| | | | End Depth | 6 | 12 | 70 | 3 | 11.5 | 11.5 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/15/2016 | 1/26/2017 | 1/26/2017 | 12/16/2016 | 1/12/2017 | 1/12/2017 | 1/16/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB411 10.5-11.5 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0062 UJ | 0.00589 U | 0.00592 U | **0.384 J** | 0.116 U | 0.116 U | 0.00592 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0062 UJ | 0.00589 U | 0.00592 U | **0.124 J** | 0.116 U | 0.116 U | 0.00592 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0062 UJ | 0.00589 U | 0.00592 U | **0.478 J** | **0.136 D** | **0.129 D** | 0.00592 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 UJ | 0.012 U | 0.012 U | **0.725 J** | **0.24 D** | **0.225 DJ** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | **1.711** | **0.376** | **0.354** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.036 J** | 0.059 U | 0.059 U | 0.238 UJ | 0.465 U | 0.464 U | 0.059 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.124 UJ | 0.118 U | 0.118 U | 2.5 UJ | 4.65 U | 4.64 U | 0.118 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.124 UJ | 0.118 U | 0.118 U | 2.38 UJ | 4.65 U | 4.64 U | 0.118 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Bromoform | 75-25-2 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.0062 UJ | 0.012 U | 0.012 U | 0.238 UJ | 0.465 U | 0.464 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 UJ | 0.012 U | 0.012 U | 0.476 R | 0.465 U | 0.464 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.233 U | 0.232 U | 0.00592 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.0062 UJ | 0.012 U | 0.012 U | 0.238 UJ | 0.465 U | 0.464 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 1.16 U | 1.16 U | 0.00592 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.233 U | 0.232 U | 0.00592 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.233 U | 0.232 U | 0.00592 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 UJ | 0.012 U | 0.012 U | 0.119 UJ | 0.465 U | 0.464 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0062 UJ | 0.012 U | 0.012 U | 0.119 UJ | 0.465 U | 0.464 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 UJ | **0.015 CD** | 0.012 U | 0.238 UJ | 0.233 U | 0.232 U | **0.019 CD** |
| Styrene | 100-42-5 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 1.16 U | 1.16 U | 0.00592 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.233 U | 0.232 U | 0.00592 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.119 UJ | 0.116 U | 0.116 U | 0.00592 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0062 UJ | 0.00589 U | 0.00592 U | 0.238 UJ | 0.233 U | 0.232 U | 0.00592 U |
| Total VOCs | TVOC | NE | NE | **0.036** | **0.015** | ND | **1.711** | **0.376** | **0.354** | **0.019** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **2.69** | 0.039 U | 0.039 U | **0.298** | **0.138** | **0.129** | 0.038 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.413 U | 0.039 U | 0.039 U | **0.662** | **0.052** | **0.058** | 0.038 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **9.1** | **0.038 J** | 0.039 U | **0.838** | **0.172** | **0.178** | 0.038 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **4.33** | **0.08** | 0.039 U | **1.4** | **0.287** | **0.341** | 0.038 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **63.2** | **0.138** | 0.039 U | **4.91** | **0.76** | **1.01** | 0.038 U |
| Fluorene | 86-73-7 | 1000 | 386 | **2.98** | 0.039 U | 0.039 U | **0.467** | **0.185** | **0.195** | 0.038 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.4 J** | 0.039 U | 0.039 U | **0.452** | **0.107** | **0.118** | 0.038 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.561** | **0.05** | 0.039 U | **1.16** | **0.099** | **0.101** | 0.038 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **34.7** | **0.083** | 0.039 U | **2.56** | **0.674** | **0.802** | 0.038 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **40.8** | **0.173** | 0.039 U | **4.09** | **0.916** | **1.13** | 0.038 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **28.8** | **0.115** | 0.039 U | **2.58** | **0.491** | **0.672** | 0.038 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **19.9** | **0.107** | 0.039 U | **2.46** | **0.408** | **0.551** | 0.038 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **19.6** | **0.088** | 0.039 U | **2.74** | **0.368** | **0.587** | 0.038 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **24.2** | **0.071** | 0.039 U | **1.85** | **0.343** | **0.382** | 0.038 U |
| Chrysene | 218-01-9 | 110 | 1 | **26.9** | **0.095** | 0.039 U | **2.41** | **0.473** | **0.618** | 0.038 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **3.03** | 0.039 U | 0.039 U | **0.606** | **0.128** | **0.171** | 0.038 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **6.44** | **0.062** | 0.039 U | **1.28** | **0.248** | **0.328** | 0.038 U |
| Total PAHs | TPAH | NE | NE | **287.631** | **1.1** | ND | **30.763** | **5.849** | **7.371** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 |
| | | | Sample Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SBXX011217 | GPEC-SB411 |
| | | | Start Depth | 4 | 11 | 69 | 2 | 10.5 | 10.5 | 69 |
| | | | End Depth | 6 | 12 | 70 | 3 | 11.5 | 11.5 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/15/2016 | 1/26/2017 | 1/26/2017 | 12/16/2016 | 1/12/2017 | 1/12/2017 | 1/16/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB411 10.5-11.5 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.413 UJ | 0.039 U | 0.039 U | 0.039 UJ | 0.038 U | 0.038 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.413 U | 0.039 U | 0.039 U | **0.16** | **0.125** | **0.101** | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | **6.31** | 0.039 U | 0.039 U | **0.174** | 0.038 U | **0.026 J** | 0.038 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **1.21** | 0.039 U | 0.039 U | **0.284** | **0.05** | **0.048** | 0.038 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.413 R | 0.039 U | 0.039 U | 0.039 R | 0.038 U | 0.038 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.413 UJ | 0.039 U | 0.039 U | 0.039 UJ | 0.038 U | 0.038 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.413 UJ | 0.039 U | 0.039 U | 0.039 UJ | 0.038 U | 0.038 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.413 UJ | 0.039 U | 0.039 U | 0.039 UJ | 0.038 U | 0.038 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.413 U | 0.039 U | 0.039 U | 0.039 U | 0.038 U | 0.038 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | **295.151** | **1.1** | ND | **31.381** | **6.024** | **7.546** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 | GPEC-SB411 |
| | | | Sample Name | GPEC-SB410 | GPEC-SB410 | GPEC-SB410 | GPEC-SB411 | GPEC-SB411 | GPEC-SBXX011217 | GPEC-SB411 |
| | | | Start Depth | 4 | 11 | 69 | 2 | 10.5 | 10.5 | 69 |
| | | | End Depth | 6 | 12 | 70 | 3 | 11.5 | 11.5 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/15/2016 | 1/26/2017 | 1/26/2017 | 12/16/2016 | 1/12/2017 | 1/12/2017 | 1/16/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB411 10.5-11.5 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.01 U | 0.023 U | 0.022 U | **0.035 J** | 0.023 U | 0.022 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.01 U | 0.023 U | 0.022 U | 0.00392 U | **0.054** | 0.022 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | **0.035** | **0.054** | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.051 U | NA | NA | 0.049 U | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00408 U | NA | NA | **0.00475 J** | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00408 U | NA | NA | **0.00459 J** | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00408 U | NA | NA | 0.00392 U | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.051 U | NA | NA | 0.049 U | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | NA | NA | 0.02 U | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | NA | NA | 0.02 U | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | 0.02 U | NA | NA | 0.02 U | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **13400** | **6330** | **2420** | **7420** | **5920** | **5970** | **2050** |
| Antimony | 7440-36-0 | NE | NE | **4.71** | **1.02** | 0.612 U | **5.91** | **1.38** | **1.98** | 0.612 U |
| Arsenic | 7440-38-2 | 16 | 16 | **10.2** | **4.58** | **0.53 J** | **14.5** | **4.38** | **5.32** | 0.612 U |
| Barium | 7440-39-3 | 10000 | 820 | **183** | **42.6** | **12.1** | **144** | **49.7** | **61.8** | **11** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.636 J** | 0.625 U | 0.612 U | **0.536 J** | 0.642 U | 0.617 U | 0.612 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.81** | 0.625 U | 0.612 U | **1.26** | **0.369 J** | **0.414 J** | 0.612 U |
| Calcium | 7440-70-2 | NE | NE | **5320** | **23400** | **1080** | **7700** | **9920** | **4220** | **7300** |
| Chromium | 7440-47-3 | NE | NE | **30.3** | **17.6** | **6.1** | **20.3** | **15.3** | **16.7** | **4.21** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.24 UJ | 1.18 U | 1.18 U | 1.19 UJ | 1.16 U | 1.16 U | 1.18 U |
| Cobalt | 7440-48-4 | NE | NE | **9.62** | **12.3** | **2.38** | **6.3** | **4.92** | **4.8** | **1.89** |
| Copper | 7440-50-8 | 10000 | 1720 | **160** | **41.6** | **5.37** | **196** | **34** | **59** | **4.37** |
| Iron | 7439-89-6 | NE | NE | **26400** | **18400** | **7390** | **16200** | **13600** | **13200** | **4980** |
| Lead | 7439-92-1 | 3900 | 450 | **525** | **74** | **1.86** | **272** | **49.5** | **82.7** | **1.61** |
| Magnesium | 7439-95-4 | NE | NE | **2180** | **10800** | **1280** | **2550** | **2320** | **2110** | **4110** |
| Manganese | 7439-96-5 | 10000 | 2000 | **467** | **293** | **65.3** | **294** | **242** | **222** | **76.8** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.26 J** | **0.135** | 0.027 U | **1.47 J** | **0.328** | **0.636** | 0.03 U |
| Nickel | 7440-02-0 | 10000 | 130 | **21.7** | **247** | **5.45** | **22.1** | **17** | **17** | **4.34** |
| Potassium | 7440-09-7 | NE | NE | **1110** | **655** | **355** | **759** | **1090** | **906** | **311** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.93** | 0.625 U | 0.612 U | **2.36** | 0.642 U | **1.21** | 0.612 U |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.404 J** | 0.625 U | 0.612 U | **0.456 J** | 0.642 U | 0.617 U | 0.612 U |
| Sodium | 7440-23-5 | NE | NE | **152** | **138** | **113** | **118** | **109** | **114** | **88.7** |
| Thallium | 7440-28-0 | NE | NE | **0.281 J** | 0.625 U | 0.612 U | **0.288 J** | 0.642 U | 0.617 U | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | **36.6** | **19.7** | **11** | **37.7** | **32.6** | **34.2** | **6.34** |
| Zinc | 7440-66-6 | 10000 | 2480 | **1510** | **127** | **11.3** | **308** | **102** | **122** | **9.02** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.9 U | 3 U | 3 U | 2.9 U | 2.9 U | 3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **18200** | **12900** | 1000 U | **57300** | **15800** | **11400** | **2240** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Sample Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Start Depth | 5 | 12 | 69 | 5 | 9 | 69 |
| | | | End Depth | 5 | 13 | 70 | 5 | 10 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2016 | 1/17/2017 | 1/17/2017 | 12/21/2016 | 1/19/2017 | 1/19/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.007 UJ | 0.562 U | 0.00552 U | **0.122** | **0.117** | 0.00669 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.007 UJ | 0.562 U | 0.00552 U | **0.094** | **0.083** | 0.00669 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.007 UJ | **8.15 D** | 0.00552 U | **0.118** | **0.075** | 0.00669 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.014 UJ | **16.4 D** | 0.011 U | **0.282** | **0.184** | 0.013 U |
| Total BTEX | TBTEX | NE | NE | ND | **24.55** | ND | **0.616** | **0.459** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.035 UJ | 2.25 U | 0.055 U | 0.144 U | 0.131 U | 0.067 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.14 UJ | 22.5 U | 0.11 U | 1.51 U | 1.31 U | 0.134 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.14 UJ | 22.5 U | 0.11 U | 1.44 U | 1.31 U | 0.134 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Bromoform | 75-25-2 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Bromomethane | 74-83-9 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.007 UJ | 2.25 U | 0.011 U | 0.144 U | 0.131 U | 0.013 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.014 UJ | 2.25 U | 0.011 U | 0.288 U | 0.131 U | 0.013 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.007 UJ | 0.562 U | 0.00552 U | 0.144 U | 0.033 U | 0.00669 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.007 UJ | 1.12 U | 0.00552 U | 0.072 U | 0.065 U | 0.00669 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.007 UJ | 2.25 U | 0.011 U | 0.144 U | 0.131 U | 0.013 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Chloromethane | 74-87-3 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.007 UJ | 5.62 U | 0.00552 U | 0.144 U | 0.326 U | 0.00669 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.007 UJ | 1.12 U | 0.00552 U | 0.072 U | 0.065 U | 0.00669 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.072 U | 0.065 U | 0.00669 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.014 UJ | 2.25 U | 0.011 U | 0.072 U | 0.131 U | 0.013 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.007 UJ | 2.25 U | 0.011 U | 0.072 U | 0.131 U | 0.013 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.014 UJ | 1.12 U | 0.011 U | 0.144 U | 0.065 U | 0.013 U |
| Styrene | 100-42-5 | NE | NE | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.007 UJ | 5.62 U | 0.00552 U | 0.144 U | 0.326 U | 0.00669 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.072 U | 0.065 U | 0.00669 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.007 UJ | 0.562 U | 0.00552 U | 0.072 U | 0.033 U | 0.00669 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.007 UJ | 1.12 U | 0.00552 U | 0.144 U | 0.065 U | 0.00669 U |
| Total VOCs | TVOC | NE | NE | ND | **24.55** | ND | **0.616** | **0.459** | ND |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.046 U | **0.283** | 0.037 U | **5.64 D** | **2.33 D** | 0.044 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.251** | 0.037 U | 0.037 U | **1.07 D** | **1.1 D** | 0.044 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.239** | **0.164** | 0.037 U | **14.7 D** | **2.65 D** | 0.044 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.71** | **0.051** | 0.037 U | **13.1 D** | **2.67 D** | 0.044 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.216** | **0.673** | 0.037 U | **50.1 D** | **6.49 D** | 0.044 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.046 U | **0.215** | 0.037 U | **9.07 D** | **3.36 D** | 0.044 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.046 U | **1.94** | 0.037 U | **10.7 D** | **4.24 D** | 0.044 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **2.37** | **4.44** | 0.037 U | **7.41 D** | **2.5 D** | 0.044 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.122** | **0.856** | 0.037 U | **59.1 D** | **11.8 D** | 0.044 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.187** | **0.697** | 0.037 U | **46.8 D** | **12.2 D** | 0.044 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.224** | **0.26** | 0.037 U | **26.7 D** | **4.45 D** | 0.044 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.205** | **0.142** | 0.037 U | **18.9 D** | **4.14 D** | 0.044 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.233** | **0.13** | 0.037 U | **16.5 D** | **2.36 D** | 0.044 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.181** | **0.155** | 0.037 U | **14 D** | **2.29 D** | 0.044 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.185** | **0.233** | 0.037 U | **21.1 D** | **4.13 D** | 0.044 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.635** | **0.026 J** | 0.037 U | **3.61 D** | **0.617 D** | 0.044 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.54** | **0.066** | 0.037 U | **10.9 D** | **1.81 D** | 0.044 U |
| Total PAHs | TPAH | NE | NE | **9.298** | **10.331** | ND | **329.4** | **69.137** | ND |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Sample Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Start Depth | 5 | 12 | 69 | 5 | 9 | 69 |
| | | | End Depth | 5 | 13 | 70 | 5 | 10 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2016 | 1/17/2017 | 1/17/2017 | 12/21/2016 | 1/19/2017 | 1/19/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.046 UJ | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.093** | **0.474** | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Carbazole | 86-74-8 | NE | NE | 0.046 U | 0.037 U | 0.037 U | **0.632 D** | **0.177 D** | 0.044 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.046 U | **0.104** | 0.037 U | **3.45 D** | **0.632 D** | 0.044 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.046 R | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.046 UJ | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.046 UJ | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.046 UJ | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Pyridine | 110-86-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.046 U | 0.037 U | 0.037 U | 0.239 U | 0.127 U | 0.044 U |
| Total SVOCs | TSVOC | NE | NE | **9.391** | **10.909** | ND | **333.482** | **69.946** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Sample Name | GPEC-SB412 | GPEC-SB412 | GPEC-SB412 | GPEC-SB413 | GPEC-SB413 | GPEC-SB413 |
| | | | Start Depth | 5 | 12 | 69 | 5 | 9 | 69 |
| | | | End Depth | 5 | 13 | 70 | 5 | 10 | 70 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2016 | 1/17/2017 | 1/17/2017 | 12/21/2016 | 1/19/2017 | 1/19/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | **0.742** | **0.717** | 0.027 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.00232 U | **0.017 J** | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.00232 U | 0.022 U | 0.022 U | 0.028 U | 0.026 U | 0.027 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.017** | ND | **0.742** | **0.717** | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.0058 U | NA | NA | 0.069 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.000464 U | NA | NA | 0.00552 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.0058 U | NA | NA | 0.069 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.023 U | NA | NA | 0.024 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.023 U | NA | NA | 0.024 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | 0.023 U | NA | NA | 0.024 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7810** | **7070** | **4580** | **3990** | **2540** | **3270** |
| Antimony | 7440-36-0 | NE | NE | **6.66** | 0.56 U | 0.583 U | **2.02** | **1.85** | 0.707 U |
| Arsenic | 7440-38-2 | 16 | 16 | **1550** | **67.5** | **0.837** | **6.99** | **5.26** | **0.722** |
| Barium | 7440-39-3 | 10000 | 820 | **93.5** | **19.5** | **26.8** | **68.8** | **50.9** | **23.8** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.441 J** | 0.56 U | 0.583 U | **0.561 J** | 0.725 U | 0.707 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.986** | 0.56 U | 0.583 U | 0.759 U | 0.725 U | 0.707 U |
| Calcium | 7440-70-2 | NE | NE | **64200** | **1000** | **9120** | **3340** | **2940** | **15400** |
| Chromium | 7440-47-3 | NE | NE | **416** | **14.4** | **9.18** | **18.3** | **8.27** | **11.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.4 UJ | 1.12 U | 1.1 U | 1.44 U | 1.31 U | 1.34 U |
| Cobalt | 7440-48-4 | NE | NE | **5.6** | **3.28** | **4.06** | **6.4** | **2.02** | **3.9** |
| Copper | 7440-50-8 | 10000 | 1720 | **174** | **6.69** | **10.8** | **252** | **111** | **14.5** |
| Iron | 7439-89-6 | NE | NE | **12000** | **12700** | **11200** | **15700** | **6840** | **10300** |
| Lead | 7439-92-1 | 3900 | 450 | **139** | **3.14** | **2.59** | **113** | **77.7** | **8.81** |
| Magnesium | 7439-95-4 | NE | NE | **2630** | **1700** | **5690** | **1560** | **1090** | **7940** |
| Manganese | 7439-96-5 | 10000 | 2000 | **136** | **239** | **154** | **162** | **180** | **205** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.585** | 0.029 U | 0.026 U | **0.364** | **0.508** | **0.016 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **14.3** | **9.45** | **9.13** | **27.5** | **7.9** | **9.23** |
| Potassium | 7440-09-7 | NE | NE | **716** | **597** | **787** | **747** | **414** | **610** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.36** | **0.448 J** | 0.583 U | 0.759 U | **0.791** | **0.612 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.418 J** | 0.56 U | 0.583 U | 0.759 U | 0.725 U | 0.707 U |
| Sodium | 7440-23-5 | NE | NE | **223** | **56.3** | **246** | **211** | **209** | **206** |
| Thallium | 7440-28-0 | NE | NE | **0.764** | 0.56 U | 0.583 U | 0.759 U | 0.725 U | 0.707 U |
| Vanadium | 7440-62-2 | NE | NE | **30.3** | **20** | **15.8** | **21.5** | **14.1** | **15.2** |
| Zinc | 7440-66-6 | 10000 | 2480 | **230** | **18.3** | **17.8** | **564** | **61.3** | **29.1** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.5 U | 2.8 U | 2.8 U | 3.6 U | 3.3 U | 3.3 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **55200** | 1000 U | **4780** | **255000** | **19400** | **18100** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB09/MW-9** | **GPEC-SB09/MW-9** | **GPEC-SB09/MW-9** |
| **Sample Name** | | | | **GPEC-SB-8 (10-12)** | **GPEC-SB-XX** | **GPEC-SB-8 (54-56)** | **GPEC-SB-8 (78-80)** | **GPEC-SB-9 (14-16)** | **GPEC-SB-9 (22-24)** | **GPEC-SB-9 (58-60)** |
| **Start Depth** | | | | **10** | **10** | **54** | **78** | **14** | **22** | **58** |
| **End Depth** | | | | **12** | **12** | **56** | **80** | **16** | **24** | **60** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/12/2009** | **5/15/2009** | **5/15/2009** | **5/15/2009** | **5/12/2009** | **5/12/2009** | **5/12/2009** |
| **Parent Sample Code** | | | | | **GPEC-SB-8 (10-12)** | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.026 U | 0.05 UJ | 0.024 U | 0.023 U | 0.024 U | 0.024 U | 0.023 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Bromoform | 75-25-2 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.013 U | 0.025 UJ | 0.012 UJ | 0.011 U | 0.012 U | 0.012 UJ | 0.011 UJ |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.013 U | 0.025 UJ | 0.012 U | 0.011 U | 0.012 U | 0.012 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.026 U | 0.05 UJ | 0.024 U | 0.023 U | 0.024 U | 0.024 U | 0.023 U |
| Styrene | 100-42-5 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | **0.0018 J** | 0.0056 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0064 U | 0.013 UJ | 0.006 U | 0.0057 U | 0.0059 U | 0.0059 U | 0.0056 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | ND | ND | **0.0018** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.13 J** | **0.2 J** | 0.32 U | 0.31 U | **0.12 J** | 0.32 U | 0.3 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.18 J** | **0.86 J** | 0.32 U | 0.31 U | **0.098 J** | 0.32 U | 0.3 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.6** | **4.2 J** | 0.32 U | 0.31 U | **0.23 J** | 0.32 U | 0.3 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.78 J** | **1.8 J** | 0.32 U | 0.31 U | **0.18 J** | 0.32 U | 0.3 U |
| Fluorene | 86-73-7 | 1000 | 386 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.051 J** | 3.4 UJ | 0.32 U | 0.31 U | **0.022 J** | 0.32 U | 0.3 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | **0.028 J** | 0.32 U | 0.3 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.39 J** | **0.42 J** | 0.32 U | 0.31 U | **0.086 J** | 0.32 U | 0.3 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.88 J** | **4 J** | 0.32 U | 0.31 U | **0.55** | 0.32 U | 0.3 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.47 J** | **3.2 J** | 0.32 U | 0.31 U | **0.22 J** | 0.32 U | 0.3 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.87 J** | **2.6 J** | 0.32 U | 0.31 U | **0.34** | 0.32 U | 0.3 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.49 J** | **1.9 J** | 0.32 U | 0.31 U | **0.24 J** | 0.32 U | 0.3 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.13 J** | **0.43 J** | 0.32 U | 0.31 U | **0.074 J** | 0.32 U | 0.3 U |
| Chrysene | 218-01-9 | 110 | 1 | **0.62 J** | **6 J** | 0.32 U | 0.31 U | **0.22 J** | 0.32 U | 0.3 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.4** | **3.8 J** | 0.32 U | 0.31 U | **0.034 J** | 0.32 U | 0.3 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.6** | **3.9 J** | 0.32 U | 0.31 U | **0.17 J** | 0.32 U | 0.3 U |
| Total PAHs | TPAH | NE | NE | **9.591** | **33.31** | ND | ND | **2.612** | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** | **PDI** |
| **Location Name** | | | | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB08/MW-8** | **GPEC-SB09/MW-9** | **GPEC-SB09/MW-9** | **GPEC-SB09/MW-9** |
| **Sample Name** | | | | **GPEC-SB-8 (10-12)** | **GPEC-SB-XX** | **GPEC-SB-8 (54-56)** | **GPEC-SB-8 (78-80)** | **GPEC-SB-9 (14-16)** | **GPEC-SB-9 (22-24)** | **GPEC-SB-9 (58-60)** |
| **Start Depth** | | | | **10** | **10** | **54** | **78** | **14** | **22** | **58** |
| **End Depth** | | | | **12** | **12** | **56** | **80** | **16** | **24** | **60** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **5/12/2009** | **5/15/2009** | **5/15/2009** | **5/15/2009** | **5/12/2009** | **5/12/2009** | **5/12/2009** |
| **Parent Sample Code** | | | | | **GPEC-SB-8 (10-12)** | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.79 J** | 3.4 UJ | **0.098 J** | **0.19 J** | **0.35** | **0.059 J** | **0.12 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Carbazole | 86-74-8 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 3.4 U | 8.4 UJ | 0.79 U | 0.76 U | 0.76 U | 0.79 U | 0.75 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 8.6 UJ | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 3.4 U | 8.4 UJ | 0.79 U | 0.76 U | 0.76 U | 0.79 U | 0.75 U |
| Hexachloroethane | 67-72-1 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Isophorone | 78-59-1 | NE | 4.4 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 8.6 U | 21 UJ | 2 U | 1.9 U | 1.9 U | 2 U | 1.9 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 1.4 U | 3.4 UJ | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.3 U |
| Total SVOCs | TSVOC | NE | NE | **10.381** | **33.31** | **0.098** | **0.19** | **2.962** | **0.059** | **0.12** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | PDI | PDI | PDI | PDI | PDI | PDI |
| | | | Location Name | GPEC-SB08/MW-8 | GPEC-SB08/MW-8 | GPEC-SB08/MW-8 | GPEC-SB08/MW-8 | GPEC-SB09/MW-9 | GPEC-SB09/MW-9 | GPEC-SB09/MW-9 |
| | | | Sample Name | GPEC-SB-8 (10-12) | GPEC-SB-XX | GPEC-SB-8 (54-56) | GPEC-SB-8 (78-80) | GPEC-SB-9 (14-16) | GPEC-SB-9 (22-24) | GPEC-SB-9 (58-60) |
| | | | Start Depth | 10 | 10 | 54 | 78 | 14 | 22 | 58 |
| | | | End Depth | 12 | 12 | 56 | 80 | 16 | 24 | 60 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/12/2009 | 5/15/2009 | 5/15/2009 | 5/15/2009 | 5/12/2009 | 5/12/2009 | 5/12/2009 |
| | | | Parent Sample Code | | GPEC-SB-8 (10-12) | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.042 UJ | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | NA | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | NA | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **6180 J** | **11100 J** | **2610** | **3540** | **3120** | **2530** | **2880** |
| Antimony | 7440-36-0 | NE | NE | 5.1 UJ | 10.3 UJ | 4.8 UJ | 4.7 UJ | 4.7 UJ | 4.7 UJ | 4.5 UJ |
| Arsenic | 7440-38-2 | 16 | 16 | **14 J** | **32.4 J** | **2.1 J** | 5.9 U | 6 U | 6 U | 5.7 U |
| Barium | 7440-39-3 | 10000 | 820 | **37.9 J** | **91 J** | **11.7** | **18.6** | **21.4** | **16.3** | **19.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.53 J** | **0.7 J** | **0.18 J** | **0.39 J** | **0.28 J** | **0.23 J** | **0.3 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.5 U | **2.2 J** | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| Calcium | 7440-70-2 | NE | NE | **2420 J** | **9700 J** | **898 J** | **4860 J** | **1060 J** | **932 J** | **1090 J** |
| Chromium | 7440-47-3 | NE | NE | **11.8 J** | **22.8 J** | **5.8 J** | **9.9 J** | **10.3 J** | **6.4 J** | **6.7 J** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 0.94 U | **1.8 J** | **0.72 J** | **0.91** | **1** | **0.73 J** | **1.1** |
| Cobalt | 7440-48-4 | NE | NE | **9.7** | **8.6 J** | **2.2** | **4** | **4.6** | **2.6** | **3.2** |
| Copper | 7440-50-8 | 10000 | 1720 | **191 J** | **586 J** | **7 J** | **26.4 J** | **21.7 J** | **9.4 J** | **12.5 J** |
| Iron | 7439-89-6 | NE | NE | **19700** | **20500 J** | **6380** | **9130** | **9690** | **7280** | **9050** |
| Lead | 7439-92-1 | 3900 | 450 | **82.7 J** | **263 J** | **1.3 J** | **3.1 J** | **6.3 J** | **1.9 J** | **3.4 J** |
| Magnesium | 7439-95-4 | NE | NE | **1910 J** | **3860 J** | **1270** | **3520** | **1700** | **1270** | **1880** |
| Manganese | 7439-96-5 | 10000 | 2000 | **575 J** | **285 J** | **65.4 J** | **174 J** | **240 J** | **181 J** | **191 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.2 J** | **0.61 J** | 0.058 U | 0.053 U | **0.0074 J** | 0.055 U | 0.053 U |
| Nickel | 7440-02-0 | 10000 | 130 | **17.5** | **21.6 J** | **5.1** | **8** | **9.8** | **6.1** | **6.1** |
| Potassium | 7440-09-7 | NE | NE | **629 J** | **1320 J** | **315** | **555** | **363** | **312** | **570** |
| Selenium | 7782-49-2 | 6800 | 4 | 11.6 UJ | 23.4 UJ | 10.9 UJ | 10.6 UJ | 10.7 UJ | 10.8 UJ | 10.3 UJ |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.27 J** | **1.2 J** | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| Sodium | 7440-23-5 | NE | NE | **1280 J** | **2540 J** | 161 U | 228 U | 97.8 U | 107 U | 153 U |
| Thallium | 7440-28-0 | NE | NE | **1.2 J** | 9.4 UJ | 4.4 U | 4.2 U | 4.3 U | 4.3 U | 4.1 U |
| Vanadium | 7440-62-2 | NE | NE | **18.3** | **27.2 J** | **6.8** | **12** | **12** | **9.5** | **8.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **98.7 J** | **304 J** | **10.8 J** | **22 J** | **29.6 J** | **28.7 J** | **18.6 J** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.255 U | 0.498 UJ | 0.239 U | 0.228 U | 0.236 U | 0.236 U | 0.224 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **85.5** | **37.6** | **85.7** | **90.2** | **90.7** | **81.1** | **96.2** |
| Total Organic Carbon | TOC | NE | NE | **30600 J** | **26800** | **250** | **2590** | **1510 J** | **207 J** | **391 J** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB217 | GPEC-SB217 | GPEC-SB217 |
| | | | Sample Name | GPEC-SB-13 (8-10) | GPEC-SB-13 (52-54) | GPEC-SB-13 (68-70) | GPEC-SB217 (6-7) | GPEC-SB217 (10-11) | GPEC-SB217 (86-87) |
| | | | Start Depth | 8 | 52 | 68 | 6 | 10 | 86 |
| | | | End Depth | 10 | 54 | 70 | 7 | 11 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2009 | 5/19/2009 | 5/20/2009 | 6/29/2012 | 7/1/2012 | 7/1/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | **1.81** | 0.00627 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | **1.44** | 0.00627 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | **155 J** | 0.00627 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | **130** | 0.013 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | **288.25** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.021 U | 0.021 U | 0.026 U | 0.028 U | 1.27 U | 0.031 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Bromoform | 75-25-2 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | 1.27 U | 0.013 U |
| Bromomethane | 74-83-9 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | 1.27 U | 0.013 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.011 U | 0.013 U | 0.00567 U | 1.27 U | 0.00627 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Chloromethane | 74-87-3 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | 1.27 U | 0.013 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | 1.27 U | 0.013 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.011 U | 1.27 U | 0.013 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.011 U | 0.013 U | 0.00567 U | 1.27 U | 0.00627 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.021 U | 0.021 U | 0.026 U | 0.011 U | 2.55 U | 0.013 U |
| Styrene | 100-42-5 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.0053 U | 0.0053 U | **0.0016 J** | 0.00567 U | 1.27 U | 0.00627 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.0053 U | 0.0053 U | 0.0064 U | 0.00567 U | 1.27 U | 0.00627 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **0.0016** | ND | **288.25** | ND |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.29 U | 0.29 U | 0.34 U | **0.545** | **140** | 0.042 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.29 U | 0.29 U | 0.34 U | **0.246** | **29.2 J** | 0.042 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.29 U | 0.29 U | 0.34 U | **2.72** | **98.5** | 0.042 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.29 U | 0.29 U | 0.34 U | **1.76** | **22 J** | 0.042 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.29 U | 0.29 U | 0.34 U | **12.8** | **98.1** | 0.042 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.29 U | 0.29 U | 0.34 U | **0.699** | **140** | 0.042 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | **46.3 J** | 0.042 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.29 U | 0.29 U | 0.34 U | **0.222** | **143** | 0.042 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.29 U | 0.29 U | 0.34 U | **8.28** | **308** | 0.042 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.29 U | 0.29 U | 0.34 U | **10.2** | **173** | 0.042 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.29 U | 0.29 U | 0.34 U | **6.29** | **69.2 J** | 0.042 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.29 U | 0.29 U | 0.34 U | **7.37** | **67.4 J** | 0.042 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.29 U | 0.29 U | 0.34 U | **6.22** | **29.1 J** | 0.042 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.29 U | 0.29 U | 0.34 U | **5.37** | **33.3 J** | 0.042 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.29 U | 0.29 U | 0.34 U | **6.44** | **86.8** | 0.042 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.29 U | 0.29 U | 0.34 U | **0.713** | **10.6 J** | 0.042 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.29 U | 0.29 U | 0.34 U | **2.12** | **18.2 J** | 0.042 U |
| Total PAHs | TPAH | NE | NE | ND | ND | ND | **71.995** | **1512.7** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB217 | GPEC-SB217 | GPEC-SB217 |
| | | | Sample Name | GPEC-SB-13 (8-10) | GPEC-SB-13 (52-54) | GPEC-SB-13 (68-70) | GPEC-SB217 (6-7) | GPEC-SB217 (10-11) | GPEC-SB217 (86-87) |
| | | | Start Depth | 8 | 52 | 68 | 6 | 10 | 86 |
| | | | End Depth | 10 | 54 | 70 | 7 | 11 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2009 | 5/19/2009 | 5/20/2009 | 6/29/2012 | 7/1/2012 | 7/1/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | NA | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.29 U | 0.29 U | 0.34 U | NA | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Carbazole | 86-74-8 | NE | NE | 0.29 U | 0.29 U | 0.34 U | **0.236** | 4.22 U | 0.042 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.29 U | 0.29 U | 0.34 U | **0.252** | **12 J** | 0.042 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.71 U | 0.71 U | 0.85 U | 0.188 U | 4.22 U | 0.042 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.8 U | 1.8 U | 2.2 U | R | 4.22 U | R |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.71 U | 0.71 U | 0.85 U | R | R | R |
| Hexachloroethane | 67-72-1 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.8 U | 1.8 U | 2.2 U | 0.188 U | 4.22 U | 0.042 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.29 U | 0.29 U | 0.34 U | 0.188 U | 4.22 U | 0.042 U |
| Total SVOCs | TSVOC | NE | NE | ND | ND | ND | **72.483** | **1524.7** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | PDI | PDI | Phase 1 | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB13/MW-13 | GPEC-SB217 | GPEC-SB217 | GPEC-SB217 |
| | | | Sample Name | GPEC-SB-13 (8-10) | GPEC-SB-13 (52-54) | GPEC-SB-13 (68-70) | GPEC-SB217 (6-7) | GPEC-SB217 (10-11) | GPEC-SB217 (86-87) |
| | | | Start Depth | 8 | 52 | 68 | 6 | 10 | 86 |
| | | | End Depth | 10 | 54 | 70 | 7 | 11 | 87 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 5/18/2009 | 5/19/2009 | 5/20/2009 | 6/29/2012 | 7/1/2012 | 7/1/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.018 U | 0.018 U | 0.022 U | 0.022 U | 0.023 U | 0.024 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | 0.022 U | 0.023 U | 0.024 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | 0.022 U | 0.023 U | 0.024 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | NA | 0.00444 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | NA | 0.00444 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | NA | 0.00444 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | NA | 0.00444 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | NA | 0.00444 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | NA | 0.056 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | NA | 0.00444 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | NA | 0.00444 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | NA | 0.00444 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | NA | 0.00444 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | NA | 0.00444 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | NA | 0.00444 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | NA | 0.00444 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | NA | 0.00444 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | NA | 0.00444 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | NA | 0.00444 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | NA | 0.00444 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | NA | 0.00444 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | NA | 0.00444 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | NA | 0.00444 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | NA | 0.00444 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | NA | 0.056 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | NA | 0.054 UJ | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3390** | **3080** | **2590** | **6030** | **5270** | **13600** |
| Antimony | 7440-36-0 | NE | NE | 4.3 UJ | 4.4 UJ | 5.2 UJ | **0.52 J** | 1.27 U | 1.28 U |
| Arsenic | 7440-38-2 | 16 | 16 | 5.5 U | 5.6 U | 6.6 U | **6.92** | **1.01** | **2.18** |
| Barium | 7440-39-3 | 10000 | 820 | **23.9** | **26.8** | **13.6** | **158** | **33.9** | **39.3** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.42 J** | **0.32 J** | **0.25 J** | **0.326 J** | **0.318 J** | **0.683** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 1.3 U | 1.3 U | 1.6 U | **0.602** | 0.635 U | 0.64 U |
| Calcium | 7440-70-2 | NE | NE | **641 J** | **6850 J** | **1010 J** | **4280** | **1850** | **950** |
| Chromium | 7440-47-3 | NE | NE | **7.1 J** | **6.3 J** | **5.4 J** | **14.7** | **9.46** | **23.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **0.31 J** | 0.88 U | 1 U | 1.13 UJ | R | 1.25 UJ |
| Cobalt | 7440-48-4 | NE | NE | **3.8** | **2.6** | **2.5** | **4.73** | **4.55** | **7.49** |
| Copper | 7440-50-8 | 10000 | 1720 | **9.4 J** | **11.7 J** | **9 J** | **270** | **11** | **13.1** |
| Iron | 7439-89-6 | NE | NE | **7500** | **6600** | **6070** | **14100** | **9100** | **17600** |
| Lead | 7439-92-1 | 3900 | 450 | 3.9 U | 4 U | 4.7 U | **252** | **4.07** | **9.17** |
| Magnesium | 7439-95-4 | NE | NE | **1430** | **3550** | **1310** | **2120** | **2330** | **3800** |
| Manganese | 7439-96-5 | 10000 | 2000 | **321 J** | **155 J** | **159 J** | **254** | **204** | **136** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.052 U | 0.053 U | 0.063 U | **0.419** | **0.00944 J** | 0.016 U |
| Nickel | 7440-02-0 | 10000 | 130 | **9.4** | **5.7** | **5.9** | **15.2** | **12.7** | **13.1** |
| Potassium | 7440-09-7 | NE | NE | **446** | **691** | **395** | **815** | **1240** | **3270** |
| Selenium | 7782-49-2 | 6800 | 4 | 9.8 UJ | 9.9 UJ | 11.7 UJ | 2.4 U | 2.54 U | 2.56 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 1.3 U | 1.3 U | 1.6 U | **0.181 J** | 0.635 U | 0.64 U |
| Sodium | 7440-23-5 | NE | NE | 65.4 U | 141 U | 146 U | **191** | **147** | **156** |
| Thallium | 7440-28-0 | NE | NE | 3.9 U | **0.94 J** | 4.7 U | 0.601 U | 0.635 U | **0.281 J** |
| Vanadium | 7440-62-2 | NE | NE | **7.9** | **9.1** | **7.2** | **22.8** | **13.6** | **26.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **29 J** | **21.3 J** | **17.2 J** | **256** | **20.4** | **101** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 0.213 UJ | 0.212 UJ | 0.256 U | 1.13 U | 1.27 U | 1.25 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | **90.7** | **91** | **78.8** | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **198 J** | **3130 J** | **163 J** | **4270** | **57500** | **1670** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 1** | **Phase 1** | **Phase 1** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB218** | **GPEC-SB218** | **GPEC-SB218** | **GPEC-TP517** | **GPEC-TP517** | **GPEC-TP518** | **GPEC-TP519** |
| **Sample Name** | | | | **GPEC-SB218 (6-7)** | **GPEC-SB218 (50-51)** | **GPEC-SB218 (116-117)** | **GPEC-TP517 (2-3)** | **GPEC-TP517 (8-9)** | **GPEC-TP518** | **GPEC-TP519 (1-2)** |
| **Start Depth** | | | | **6** | **50** | **116** | **2** | **8** | **3** | **1** |
| **End Depth** | | | | **7** | **51** | **117** | **3** | **9** | **4** | **2** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **6/28/2012** | **6/30/2012** | **6/30/2012** | **8/30/2017** | **8/31/2017** | **1/11/2018** | **9/6/2017** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00526 U | 0.00588 U | 0.00613 U | **0.211** | 0.115 U | 0.00609 U | 0.00658 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00526 U | 0.00588 U | 0.00613 U | **0.258** | 0.115 U | 0.00609 U | 0.00658 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00526 U | 0.00588 U | 0.00613 U | **0.046 J** | 0.115 U | 0.00609 U | 0.00658 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.01 U | 0.012 U | 0.012 U | **0.216** | 0.229 U | 0.012 U | 0.013 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | **0.731** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.026 U | 0.029 U | 0.031 U | 0.217 U | 0.458 U | 0.061 U | 0.066 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | NA | 1.09 U | 2.29 U | 0.122 U | 0.132 U |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | NA | 1.09 U | 2.29 U | 0.122 U | 0.132 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Bromoform | 75-25-2 | NE | NE | 0.01 U | 0.012 U | 0.012 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Bromomethane | 74-83-9 | NE | NE | 0.01 U | 0.012 U | 0.012 U | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00526 U | 0.00588 U | 0.00613 U | **0.236** | 0.458 U | 0.012 U | 0.013 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | NA | 0.217 U | 0.458 U | 0.012 U | 0.026 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00526 U | 0.00588 U | 0.00613 U | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | NA | 0.217 U | 0.458 U | 0.012 U | 0.013 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.01 U | 0.012 U | 0.012 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | NA | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.01 U | 0.012 U | 0.012 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.01 U | 0.012 U | 0.012 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | NA | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00526 U | 0.00588 U | 0.00613 U | 0.217 U | 0.458 U | 0.012 U | 0.013 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | NA | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00526 U | 0.00588 U | 0.00613 U | 0.217 U | 0.458 U | 0.012 U | 0.013 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.01 U | 0.012 U | 0.012 U | 0.109 U | 0.229 U | 0.012 U | 0.013 U |
| Styrene | 100-42-5 | NE | NE | 0.00526 U | 0.00588 U | 0.00613 U | **0.163** | 0.115 U | 0.00609 U | 0.00658 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00526 U | 0.00588 U | 0.00613 U | **0.086** | 0.115 U | 0.00609 U | **0.00193 DJ** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | NA | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | NA | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00526 U | 0.00588 U | 0.00613 U | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | NA | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | NA | 0.054 U | 0.115 U | 0.00609 U | 0.00658 U |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | NA | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00526 U | 0.00588 U | 0.00613 U | 0.109 U | 0.229 U | 0.00609 U | 0.00658 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | **1.216** | ND | ND | **0.00193** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.035 U | 0.039 U | 0.041 U | **2.04 D** | **0.33** | **0.232 D** | **0.18 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.035 U | 0.039 U | 0.041 U | **3.52 D** | **0.222** | **1.26 D** | **3.34 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.035 U | 0.039 U | 0.041 U | **9.35 D** | **0.171** | **1.86 D** | **2.31 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.035 U | 0.039 U | 0.041 U | **14.6 D** | **0.152** | **1.9 D** | **6.24 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.035 U | 0.039 U | 0.041 U | **32.5 D** | **0.245** | **6.65 D** | **6.74 D** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.035 U | 0.039 U | 0.041 U | **4.98 D** | **0.743** | **1.24 D** | **1.44 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.035 U | 0.039 U | 0.041 U | **2.8 D** | **0.131** | **1.02 D** | **0.907 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.035 U | 0.039 U | 0.041 U | **3.97 D** | **0.092** | **1.33 D** | **1.03 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.035 U | **0.045** | 0.041 U | **42.6 D** | **0.167** | **9.52 D** | **6.86 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.035 U | 0.039 U | 0.041 U | **44.3 D** | **0.478** | **8.66 D** | **14.5 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.035 U | 0.039 U | 0.041 U | **19.3 D** | **0.157** | **6.05 D** | **6.94 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.035 U | 0.039 U | 0.041 U | **18.4 D** | **0.155** | **3.97 D** | **6.8 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.035 U | 0.039 U | 0.041 U | **12.6 D** | **0.127** | **2.21 D** | **4.34 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.035 U | 0.039 U | 0.041 U | **14 D** | **0.103** | **3.18 D** | **3.95 D** |
| Chrysene | 218-01-9 | 110 | 1 | 0.035 U | 0.039 U | 0.041 U | **18.9 D** | **0.191** | **6.43 D** | **8.01 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.035 U | 0.039 U | 0.041 U | **3.78 D** | **0.044** | **1.05 D** | **2.45 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.035 U | 0.039 U | 0.041 U | **10.7 D** | **0.118** | **1.72 D** | **4.21 D** |
| Total PAHs | TPAH | NE | NE | ND | **0.045** | ND | **258.34** | **3.626** | **58.282** | **80.247** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | Phase 1 | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-SB218 | GPEC-SB218 | GPEC-SB218 | GPEC-TP517 | GPEC-TP517 | GPEC-TP518 | GPEC-TP519 |
| Sample Name | | | | GPEC-SB218 (6-7) | GPEC-SB218 (50-51) | GPEC-SB218 (116-117) | GPEC-TP517 (2-3) | GPEC-TP517 (8-9) | GPEC-TP518 | GPEC-TP519 (1-2) |
| Start Depth | | | | 6 | 50 | 116 | 2 | 8 | 3 | 1 |
| End Depth | | | | 7 | 51 | 117 | 3 | 9 | 4 | 2 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 6/28/2012 | 6/30/2012 | 6/30/2012 | 8/30/2017 | 8/31/2017 | 1/11/2018 | 9/6/2017 |
| Parent Sample Code | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Carbazole | 86-74-8 | NE | NE | 0.035 U | 0.039 U | 0.041 U | **0.888 D** | 0.037 U | **0.213 D** | 0.175 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.035 U | 0.039 U | 0.041 U | **1.49 D** | **0.387** | **0.129 D** | 0.175 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | **0.174 DJ** |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | R | R | R | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | R | R | R | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | NA | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.035 U | 0.039 U | 0.041 U | 0.356 U | 0.037 U | 0.08 U | 0.175 U |
| Total SVOCs | TSVOC | NE | NE | ND | **0.045** | ND | **260.718** | **4.013** | **58.624** | **80.421** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | Phase 1 | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-SB218 | GPEC-SB218 | GPEC-SB218 | GPEC-TP517 | GPEC-TP517 | GPEC-TP518 | GPEC-TP519 |
| Sample Name | | | | GPEC-SB218 (6-7) | GPEC-SB218 (50-51) | GPEC-SB218 (116-117) | GPEC-TP517 (2-3) | GPEC-TP517 (8-9) | GPEC-TP518 | GPEC-TP519 (1-2) |
| Start Depth | | | | 6 | 50 | 116 | 2 | 8 | 3 | 1 |
| End Depth | | | | 7 | 51 | 117 | 3 | 9 | 4 | 2 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 6/28/2012 | 6/30/2012 | 6/30/2012 | 8/30/2017 | 8/31/2017 | 1/11/2018 | 9/6/2017 |
| Parent Sample Code | | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.023 U | 0.024 U | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.023 U | 0.024 U | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.023 U | 0.024 U | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | 0.063 U | 0.067 U | 0.072 U | 0.077 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.021 U | 0.023 U | 0.024 UJ | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.052 U | NA | NA | 0.053 U | NA | 0.06 U | 0.321 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00419 U | NA | NA | 0.00422 U | NA | **0.005** | 0.026 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00419 U | NA | NA | 0.00422 U | NA | **0.00383 J** | 0.026 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00419 U | NA | NA | **0.021** | NA | 0.00478 U | 0.026 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00419 U | NA | NA | 0.00422 U | NA | **0.02** | 0.026 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00419 U | NA | NA | 0.00422 U | NA | 0.00478 U | 0.026 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.052 U | NA | NA | 0.053 U | NA | 0.06 U | 0.321 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | NA | 0.018 U | NA | 0.02 U | 0.022 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | NA | 0.018 U | NA | 0.02 U | 0.022 U |
| Silvex | 93-72-1 | 1000 | | 0.05 U | NA | NA | 0.018 U | NA | 0.02 U | 0.022 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4710** | **3850** | **16000** | **13300** | **16400** | **2770** | **4620** |
| Antimony | 7440-36-0 | NE | NE | 1.1 U | 1.3 U | 1.33 U | **1.91** | **0.453 J** | **8.58** | **2.8** |
| Arsenic | 7440-38-2 | 16 | 16 | **1.39** | **0.874** | **1.42** | **11.4** | **4.84** | **17.2** | **19.4** |
| Barium | 7440-39-3 | 10000 | 820 | **27.9** | **38.6** | **46.8** | **210** | **53.9** | **153** | **559** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.254 J** | 0.65 U | **0.622 J** | **0.515 J** | **0.467 J** | **0.383 J** | **0.527 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.551 U | 0.65 U | 0.663 U | **0.983** | 0.592 U | **0.905** | **1.03** |
| Calcium | 7440-70-2 | NE | NE | **1050** | **12400** | **624** | **10800** | **1920** | **2100** | **8240** |
| Chromium | 7440-47-3 | NE | NE | **8.48** | **8.66** | **24** | **20.5** | **19** | **18** | **35.9** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.05 UJ | 1.18 UJ | 1.23 UJ | 1.09 U | 1.15 U | 1.22 U | 1.32 U |
| Cobalt | 7440-48-4 | NE | NE | **3.95** | **2.73** | **8.56** | **5.99** | **7.06** | **3.72** | **6.27** |
| Copper | 7440-50-8 | 10000 | 1720 | **14** | **9.98** | **16.5** | **541** | **39** | **182** | **506** |
| Iron | 7439-89-6 | NE | NE | **8370** | **7730** | **22400** | **24600** | **17800** | **12000** | **61900** |
| Lead | 7439-92-1 | 3900 | 450 | **6.78** | **16.7** | **9.69** | **303** | **39.9** | **186** | **3560** |
| Magnesium | 7439-95-4 | NE | NE | **1690** | **3120** | **3980** | **8160** | **5360** | **643** | **6560** |
| Manganese | 7439-96-5 | 10000 | 2000 | **234** | **397** | **258** | **215** | **171** | **113** | **231** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.013 U | 0.015 U | 0.015 U | **1.94** | **0.106** | **1.47** | **4.82** |
| Nickel | 7440-02-0 | 10000 | 130 | **9.11** | **6.2** | **16.3** | **26.6** | **13.7** | **44.3** | **51.2** |
| Potassium | 7440-09-7 | NE | NE | **881** | **571** | **2060** | **904** | **1380** | **342** | **513** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.21 U | 2.6 U | 2.65 U | **1.67** | **1.31** | **1.9** | **2.04** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.551 U | 0.65 U | 0.663 U | **0.293 J** | 0.592 U | **0.394 J** | **0.297 J** |
| Sodium | 7440-23-5 | NE | NE | **134** | **307** | **211** | **205** | **112** | **100** | **115** |
| Thallium | 7440-28-0 | NE | NE | 0.551 U | 0.65 U | **0.25 J** | 0.585 U | 0.592 U | 0.61 U | 0.702 U |
| Vanadium | 7440-62-2 | NE | NE | **10.3** | **10.9** | **28.6** | **60.3** | **29** | **85.3** | **137** |
| Zinc | 7440-66-6 | 10000 | 2480 | **23.2** | **25.4** | **58.8** | **311** | **72.9** | **219** | **364** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.05 U | 1.13 U | 1.23 U | 2.7 U | 2.9 U | 3 U | 3.3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | 1000 U | **3350** | **135000** | **22200** | **767000** | **496000** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP520 | GPEC-TP521 | GPEC-TP522 | GPEC-TP523 | GPEC-TP524 | GPEC-TP525 |
| | | | Sample Name | GPEC-TP520 (3-4) | GPEC-TP521 (1-2) | GPEC-TP522 (3-4) | GPEC-TP523 (2-3) | GPEC-TP524 (1-2) | GPEC-TP525 (1-2) |
| | | | Start Depth | 3 | 1 | 3 | 2 | 1 | 1 |
| | | | End Depth | 4 | 2 | 4 | 3 | 2 | 2 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2017 | 12/22/2017 | 12/8/2017 | 12/4/2017 | 9/28/2017 | 9/1/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.371 D** | **1.34** | **8.65 D** | **5.33 D** | 0.109 U | **0.705 D** |
| Toluene | 108-88-3 | 1000 | 0.7 | **1.85 D** | **0.302** | **7.15 D** | **1.8 D** | 0.109 U | **1.47 D** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **3.78 D** | 0.059 U | **30.1 D** | **7.93 D** | **0.475 D** | **0.314 D** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **5.19 D** | 0.118 U | **40.4 D** | **9.53 D** | **0.214 DJ** | **3.31 D** |
| Total BTEX | TBTEX | NE | NE | **11.191** | **1.642** | **86.3** | **24.59** | **0.689** | **5.799** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 1.25 U | **0.958** | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 6.26 U | 1.18 U | 11.4 U | 11.1 U | 2.19 U | 5.43 U |
| Acrylonitrile | 107-13-1 | NE | NE | 6.26 U | 1.18 U | 11.4 U | 11.1 U | 2.19 U | 5.43 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Bromoform | 75-25-2 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Bromomethane | 74-83-9 | NE | NE | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.25 U | 0.235 U | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 1.25 U | 0.235 U | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 1.25 U | 0.235 U | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Chloromethane | 74-87-3 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 2-Hexanone | 591-78-6 | NE | NE | 1.25 U | 0.235 U | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.25 U | 0.235 U | 2.28 U | 2.22 U | 0.437 U | 1.09 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| Styrene | 100-42-5 | NE | NE | **1.86 D** | 0.059 U | 0.569 U | 0.554 U | 0.109 U | **1.75 D** |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.313 U | **0.133** | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.626 U | **0.094 J** | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.313 U | 0.059 U | 0.569 U | 0.554 U | 0.109 U | 0.272 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.626 U | 0.118 U | 1.14 U | 1.11 U | 0.219 U | 0.543 U |
| Total VOCs | TVOC | NE | NE | **13.051** | **2.827** | **86.3** | **24.59** | **0.689** | **7.549** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **53.8 D** | **0.817 D** | **29.1 D** | **30.5 D** | **22.1 D** | **4.12 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **75.9 D** | **1.95 D** | **117 D** | **54 D** | **2.7 D** | **30.5 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **83 D** | **9.25 D** | **109 D** | **62.6 D** | **8.82 D** | **22.3 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **30 D** | **51.6 D** | **34.9 D** | **33.2 D** | **2.77 D** | **31.6 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **179 D** | **70.2 D** | **147 D** | **133 D** | **10.5 D** | **68.9 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **162 D** | **0.994 D** | **151 D** | **87.5 D** | **15.2 D** | **21.3 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **448 D** | **0.629 DJ** | **252 D** | **1.68 D** | **92.6 D** | **24.8 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **630 D** | **1.09 D** | **295 D** | **39.9 D** | **169 D** | **40 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **705 D** | **47.3 D** | **523 D** | **258 D** | **40.7 D** | **87.9 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **330 D** | **47 D** | **412 D** | **329 D** | **20 D** | **151 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **93.5 D** | **40.1 D** | **135 D** | **97.2 D** | **7.39 D** | **66.5 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **63.6 D** | **43.5 D** | **78 D** | **61.5 D** | **5.23 D** | **49.1 D** |
| Benzo[b]fluoranthene | 205-39-2 | 11 | 1.7 | **20.8 D** | **67.6 D** | **39.5 D** | **39.8 D** | **2.14 D** | **40.4 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **37.1 D** | **29.8 D** | **41.5 D** | **29.5 D** | **3.08 D** | **29.1 D** |
| Chrysene | 218-01-9 | 110 | 1 | **96.7 D** | **45.4 D** | **132 D** | **91.9 D** | **7.08 D** | **68.7 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **5.48 D** | **18.1 D** | **10 D** | **10.3 D** | **0.716 D** | **13.3 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **19.7 D** | **37.3 D** | **28.6 D** | **23.9 D** | **1.85 D** | **25.3 D** |
| Total PAHs | TPAH | NE | NE | **3033.58** | **512.63** | **2534.6** | **1383.48** | **411.876** | **774.82** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP520 | GPEC-TP521 | GPEC-TP522 | GPEC-TP523 | GPEC-TP524 | GPEC-TP525 |
| | | | Sample Name | GPEC-TP520 (3-4) | GPEC-TP521 (1-2) | GPEC-TP522 (3-4) | GPEC-TP523 (2-3) | GPEC-TP524 (1-2) | GPEC-TP525 (1-2) |
| | | | Start Depth | 3 | 1 | 3 | 2 | 1 | 1 |
| | | | End Depth | 4 | 2 | 4 | 3 | 2 | 2 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2017 | 12/22/2017 | 12/8/2017 | 12/4/2017 | 9/28/2017 | 9/1/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Carbazole | 86-74-8 | NE | NE | **5.76 D** | **4.64 D** | 1.89 U | **0.807 D** | 0.711 U | **0.679 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 6.13 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 6.13 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Chloronapthalene | 91-58-7 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **20.6 D** | **1.97 D** | **18.3 D** | **11.7 D** | **2.4 D** | **1.22 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 6.13 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Hexachloroethane | 67-72-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Isophorone | 78-59-1 | NE | 4.4 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | **0.538 D** |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Pyridine | 110-86-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 2.04 U | 0.77 U | 1.89 U | 0.366 U | 0.711 U | 0.356 U |
| Total SVOCs | TSVOC | NE | NE | **3059.94** | **519.24** | **2552.9** | **1395.987** | **414.276** | **777.257** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP520 | GPEC-TP521 | GPEC-TP522 | GPEC-TP523 | GPEC-TP524 | GPEC-TP525 |
| | | | Sample Name | GPEC-TP520 (3-4) | GPEC-TP521 (1-2) | GPEC-TP522 (3-4) | GPEC-TP523 (2-3) | GPEC-TP524 (1-2) | GPEC-TP525 (1-2) |
| | | | Start Depth | 3 | 1 | 3 | 2 | 1 | 1 |
| | | | End Depth | 4 | 2 | 4 | 3 | 2 | 2 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/19/2017 | 12/22/2017 | 12/8/2017 | 12/4/2017 | 9/28/2017 | 9/1/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.073 U | 0.069 U | 0.064 U | 0.124 U | 0.437 U | 0.062 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.305 U | 0.057 U | 0.265 U | 0.103 U | 0.546 U | 0.258 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.024 U | 0.00459 U | 0.021 U | 0.00826 U | 0.044 U | 0.021 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.305 U | 0.057 U | 0.265 U | 0.103 U | 0.546 U | 0.258 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.021 U | 0.02 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.021 U | 0.02 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.021 U | 0.02 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9810** | **7350** | **8390** | **6930** | **6120** | **4000** |
| Antimony | 7440-36-0 | NE | NE | **2.3** | **2.45** | **2.4** | **4.08** | **12.2** | **1.66** |
| Arsenic | 7440-38-2 | 16 | 16 | **9.99** | **7.02** | **7.1** | **13.5** | **12.2** | **23** |
| Barium | 7440-39-3 | 10000 | 820 | **147** | **91** | **95.6** | **201** | **293** | **292** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.588 J** | **0.391 J** | **0.485 J** | **0.361 J** | **0.455 J** | **0.705** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.855** | **6.6** | **5.15** | **0.926** | **1.15** | **0.507 J** |
| Calcium | 7440-70-2 | NE | NE | **8070** | **17200** | **995** | **4740** | **5120** | **1450** |
| Chromium | 7440-47-3 | NE | NE | **30.5** | **28.2** | **18.4** | **19.8** | **24.8** | **11** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.25 U | 1.18 U | 1.14 U | 1.11 U | 1.09 U | 1.09 U |
| Cobalt | 7440-48-4 | NE | NE | **7.88** | **4.84** | **6.1** | **5.12** | **5.98** | **4.41** |
| Copper | 7440-50-8 | 10000 | 1720 | **268** | **121** | **367** | **251** | **287** | **686** |
| Iron | 7439-89-6 | NE | NE | **24000** | **15100** | **14600** | **17800** | **21600** | **12100** |
| Lead | 7439-92-1 | 3900 | 450 | **266** | **223** | **275** | **541** | **505** | **249** |
| Magnesium | 7439-95-4 | NE | NE | **3360** | **4560** | **2290** | **2190** | **2680** | **715** |
| Manganese | 7439-96-5 | 10000 | 2000 | **330** | **565** | **176** | **161** | **489** | **102** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.49** | **7.18** | **0.462** | **1.35** | **1.4** | **0.645** |
| Nickel | 7440-02-0 | 10000 | 130 | **25.6** | **22.2** | **29.5** | **18** | **39.9** | **21** |
| Potassium | 7440-09-7 | NE | NE | **1280** | **650** | **909** | **879** | **965** | **409** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.83** | **1.64** | **3.09** | **3.59** | **1.45** | **1.9** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.438 J** | 0.639 U | **0.321 J** | **0.676** | **0.387 J** | **0.381 J** |
| Sodium | 7440-23-5 | NE | NE | **150** | **397** | **92.9** | **578** | **524** | **115** |
| Thallium | 7440-28-0 | NE | NE | 0.654 U | 0.639 U | **0.298 J** | **0.304 J** | 0.577 U | 0.582 U |
| Vanadium | 7440-62-2 | NE | NE | **45.1** | **53.8** | **25.2** | **27.8** | **53.4** | **71** |
| Zinc | 7440-66-6 | 10000 | 2480 | **287** | **1440** | **568** | **333** | **511** | **172** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3.1 U | 2.9 U | 2.8 U | 2.8 U | 2.7 U | 2.7 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **74300** | **85900** | **72600** | **10700** | **89700** | **817000** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP526 | GPEC-TP527 | GPEC-TP528 | GPEC-TP529 | GPEC-TP530 | GPEC-TP531 | GPEC-TP532 |
| | | | Sample Name | GPEC-TP526 (7-8) | GPEC-TP527 | GPEC-TP528 (6-7) | GPEC-TP529 (7-8) | GPEC-TP530 (2-3) | GPEC-TP531 (5-6) | GPEC-TP532 |
| | | | Start Depth | 7 | 2 | 6 | 7 | 2 | 5 | 2 |
| | | | End Depth | 8 | 3 | 7 | 8 | 3 | 6 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/29/2017 | 10/25/2017 | 12/1/2017 | 9/29/2017 | 9/26/2017 | 8/29/2017 | 1/3/2018 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **2.32 D** | **1.19** | 2.75 U | 0.356 U | **0.121 D** | **0.095** | 0.00606 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **6.25 D** | **0.756** | **14.9 D** | 0.356 U | **0.086 DJ** | **0.062** | 0.00606 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **48.3 D** | **1.23** | **214 D** | **3.05 D** | **1.07 D** | **0.282** | 0.00606 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **48.6 D** | **1.94** | **220 D** | **0.981 D** | **0.591 D** | **0.193** | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **105.47** | **5.116** | **448.9** | **4.031** | **1.868** | **0.632** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | 0.118 U | 0.061 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 23.3 U | 1.14 U | 54.9 U | 7.12 U | 2.24 U | 0.588 U | 0.121 U |
| Acrylonitrile | 107-13-1 | NE | NE | 23.3 U | 1.14 U | 54.9 U | 7.12 U | 2.24 U | 0.588 U | 0.121 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Bromoform | 75-25-2 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Bromomethane | 74-83-9 | NE | NE | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | **0.141** | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | 0.118 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | 0.118 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Chloromethane | 74-87-3 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 2-Hexanone | 591-78-6 | NE | NE | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | 0.118 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 4.65 U | 0.228 U | 11 U | 1.42 U | 0.448 U | 0.118 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | **3.77 D** | **0.328** | **140 D** | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 1.16 U | 0.057 U | 2.75 U | 0.356 U | 0.112 U | 0.029 U | 0.00606 U |
| Vinyl acetate | 108-05-4 | NE | NE | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 2.33 U | 0.114 U | 5.49 U | 0.712 U | 0.224 U | 0.059 U | 0.00606 U |
| Total VOCs | TVOC | NE | NE | **109.24** | **5.444** | **588.9** | **4.031** | **1.868** | **0.773** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **20.1 D** | **1.84** | **23.8 D** | **1.29 D** | **1.79 D** | **0.136** | **1.43 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **140 D** | **10.2** | **236 D** | **0.966 D** | **0.283 D** | **0.095** | **0.379 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **90.4 D** | **8.9** | **85.1 D** | **1.65 D** | **1.38 D** | **0.094** | **4.08 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **93.4 D** | **15.4** | **37.3 D** | **2 D** | **0.251 D** | **0.254** | **8.94 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **150 D** | **34.8** | **110 D** | **6.16 D** | **1.75 D** | **0.602** | **32.2 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **110 D** | **4.74** | **116 D** | **0.77 D** | **1.01 D** | **0.068** | **1.23 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **124 D** | **1.32** | **628 D** | **0.331 D** | **0.496 D** | **0.039** | **0.241 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **490 D** | **2.12** | **2250 D** | **1.27 D** | **10.3 D** | **0.174** | **0.355 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **381 D** | **34** | **337 D** | **2.62 D** | **6.48 D** | **0.322** | **17.8 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **378 D** | **65.6** | **281 D** | **6.47 D** | **2.32 D** | **1.08** | **25.9 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **120 D** | **29.7** | **87.4 D** | **3.27 D** | **0.592 D** | **0.395** | **16.2 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **99.1 D** | **18.7** | **70.3 D** | **2.94 D** | **0.393 D** | **0.34** | **13.7 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **48.8 D** | **12.4** | **32.7 D** | **2.64 D** | **0.296 D** | **0.335** | **11.1 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **44.8 D** | **13.5** | **35.3 D** | 2 D | **0.239 D** | **0.26** | **9.22 D** |
| Chrysene | 218-01-9 | 110 | 1 | **112 D** | **37.9** | **74.9 D** | **3.66 D** | **0.526 D** | **0.365** | **16.7 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **22 D** | **3.76 J** | **7.8 D** | **0.572 D** | 0.07 U | **0.078** | **3.14 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **43.3 D** | **9.59 J** | **23.1 D** | **1.64 D** | **0.18 D** | **0.221** | **7.79 D** |
| Total PAHs | TPAH | NE | NE | **2466.9** | **304.47** | **4435.7** | **40.249** | **28.286** | **4.858** | **170.405** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP526** | **GPEC-TP527** | **GPEC-TP528** | **GPEC-TP529** | **GPEC-TP530** | **GPEC-TP531** | **GPEC-TP532** |
| **Sample Name** | | | | **GPEC-TP526 (7-8)** | **GPEC-TP527** | **GPEC-TP528 (6-7)** | **GPEC-TP529 (7-8)** | **GPEC-TP530 (2-3)** | **GPEC-TP531 (5-6)** | **GPEC-TP532** |
| **Start Depth** | | | | **7** | **2** | **6** | **7** | **2** | **5** | **2** |
| **End Depth** | | | | **8** | **3** | **7** | **8** | **3** | **6** | **3** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **11/29/2017** | **10/25/2017** | **12/1/2017** | **9/29/2017** | **9/26/2017** | **8/29/2017** | **1/3/2018** |
| **Parent Sample Code** | | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | **0.043 DJ** | 0.038 U | 0.202 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Carbazole | 86-74-8 | NE | NE | **1.17 D** | 0.758 U | **2.39 D** | **0.436 D** | 0.07 U | 0.038 U | **1.27 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **13.2 D** | 0.758 U | **16.7 D** | **0.818 D** | **0.509 D** | **0.036 J** | **0.706 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.387 U | 0.758 UJ | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.387 U | 0.758 U | **1.1 DJ** | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.387 U | 0.758 UJ | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.387 U | 0.758 UJ | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.387 U | 0.758 UJ | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Pyridine | 110-86-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.387 U | 0.758 U | 1.83 U | 0.231 U | 0.07 U | 0.038 U | 0.202 U |
| Total SVOCs | TSVOC | NE | NE | **2481.27** | **304.47** | **4455.89** | **41.503** | **28.838** | **4.894** | **172.381** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP526 | GPEC-TP527 | GPEC-TP528 | GPEC-TP529 | GPEC-TP530 | GPEC-TP531 | GPEC-TP532 |
| | | | Sample Name | GPEC-TP526 (7-8) | GPEC-TP527 | GPEC-TP528 (6-7) | GPEC-TP529 (7-8) | GPEC-TP530 (2-3) | GPEC-TP531 (5-6) | GPEC-TP532 |
| | | | Start Depth | 7 | 2 | 6 | 7 | 2 | 5 | 2 |
| | | | End Depth | 8 | 3 | 7 | 8 | 3 | 6 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/29/2017 | 10/25/2017 | 12/1/2017 | 9/29/2017 | 9/26/2017 | 8/29/2017 | 1/3/2018 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.066 U | 0.066 U | 0.065 U | 0.084 U | 0.065 U | 0.07 U | 0.072 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.165 U | 0.276 U | 0.164 U | 0.07 U | 0.054 U | 0.058 U | 0.06 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | **0.00767** | 0.00479 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | **0.00505** | 0.00479 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.013 U | 0.022 U | 0.013 U | 0.00562 U | 0.00432 U | 0.00464 U | 0.00479 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.165 U | 0.276 U | 0.164 U | 0.07 U | 0.054 U | 0.058 U | 0.06 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | 0.018 U | 0.018 U | 0.023 U | 0.018 U | 0.019 U | 0.02 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | 0.018 U | 0.018 U | 0.023 U | 0.018 U | 0.019 U | 0.02 U |
| Silvex | 93-72-1 | 1000 | | 0.019 U | 0.018 U | 0.018 U | 0.023 U | 0.018 U | 0.019 U | 0.02 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9040** | **6440** | **8500** | **9090** | **8590** | **19300** | **6980** |
| Antimony | 7440-36-0 | NE | NE | **9.03** | **9.69** | **0.744** | **0.63 J** | **1.33** | **2.84** | **211** |
| Arsenic | 7440-38-2 | 16 | 16 | **21** | **41.3** | **5.88** | **6.83** | **3.76** | **9.85** | **19** |
| Barium | 7440-39-3 | 10000 | 820 | **235** | **120** | **55.3** | **142** | **89** | **523** | **899** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.503 J** | **0.422 J** | **0.461 J** | **0.52 J** | **0.431 J** | **0.524 J** | **0.488 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.83** | **1.55 J** | 0.595 U | **0.693 J** | 0.598 U | **382** | **2.11** |
| Calcium | 7440-70-2 | NE | NE | **3010** | **3970** | **1220** | **1890** | **1000** | **1870** | **9430** |
| Chromium | 7440-47-3 | NE | NE | **26.6** | **77.9** | **18.9** | **15.2** | **16.6** | **22.6** | **26.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.16 U | 1.14 UJ | 1.1 U | 1.42 U | 1.12 U | 1.18 U | 1.21 U |
| Cobalt | 7440-48-4 | NE | NE | **6.52** | **14.4** | **5.69** | **5.96** | **4.25** | **6.59** | **5.9** |
| Copper | 7440-50-8 | 10000 | 1720 | **239** | **971** | **54.7** | **156** | **30.9** | **101** | **382** |
| Iron | 7439-89-6 | NE | NE | **25500** | **107000** | **21000** | **13700** | **18700** | **21100** | **25200** |
| Lead | 7439-92-1 | 3900 | 450 | **589** | **2850** | **73.2** | **96.4** | **37.2** | **727** | **1310** |
| Magnesium | 7439-95-4 | NE | NE | **2280** | **2650** | **2550** | **2000** | **2310** | **5080** | **2230** |
| Manganese | 7439-96-5 | 10000 | 2000 | **309** | **525** | **181** | **122** | **155** | **373** | **356** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.906** | **1.55 J** | **0.148** | **0.371** | **0.122** | **0.486** | **16.2** |
| Nickel | 7440-02-0 | 10000 | 130 | **21.3** | **74.6** | **20.4** | **11.8** | **11.6** | **15.3** | **21.7** |
| Potassium | 7440-09-7 | NE | NE | **952** | **819** | **860** | **654** | **785** | **1000** | **923** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.32** | **3.9** | **1.44** | **2.26** | **1.1** | **4.95** | **2.38** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.575 J** | **1.19** | **0.251 J** | 0.733 U | 0.598 U | 0.59 U | **1.51** |
| Sodium | 7440-23-5 | NE | NE | **214** | **413** | **350** | **119** | **205** | **156** | **224** |
| Thallium | 7440-28-0 | NE | NE | 0.58 U | **0.251 J** | 0.595 U | 0.733 U | 0.598 U | 0.59 U | **0.381 J** |
| Vanadium | 7440-62-2 | NE | NE | **39.8** | **95** | **26.7** | **20.5** | **24.9** | **29.8** | **23.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **306** | **483** | **96.1** | **98.9** | **45.8** | **223** | **1570** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.8 U | 2.7 U | 3.5 U | 2.8 U | 2.9 U | 3 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **81800** | **78100** | **58400** | **14600** | **7380** | **12600** | **71700** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP533 | GPEC-TP533 | GPEC-TP534 | GPEC-TP535 | GPEC-TP536 | GPEC-TP537 | GPEC-TP538 |
| | | | Sample Name | GPEC-TP533 (2-3) | GPEC-TP533 (8-9) | GPEC-TP534 | GPEC-TP535 (2-3) | GPEC-TP536 (4-5) | GPEC-TP537 (2-3) | GPEC-TP538 (2-3) |
| | | | Start Depth | 2 | 8 | 4 | 2 | 4 | 2 | 2 |
| | | | End Depth | 3 | 9 | 5 | 3 | 5 | 3 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/18/2017 | 9/18/2017 | 1/9/2018 | 8/25/2017 | 9/15/2017 | 8/25/2017 | 11/15/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.28 U | 1.32 U | **0.018 D** | **0.218** | 0.00582 U | **0.611 D** | **29.3 D** |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.447 D** | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | **0.225 D** | **119 D** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.687 D** | **5.71 D** | **0.013 D** | 0.028 U | 0.00582 U | **0.147 D** | **473 D** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **1.02 D** | **2.69 D** | **0.00913 DJ** | 0.056 U | 0.012 U | 0.22 U | **537 D** |
| Total BTEX | TBTEX | NE | NE | **2.154** | **8.4** | **0.04013** | **0.218** | ND | **0.983** | **1158.3** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 1.12 U | 5.27 U | 0.057 U | **0.434** | 0.058 U | 0.439 U | 20 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 11.2 U | 52.7 U | 0.115 U | 0.559 U | 0.116 U | 2.2 U | 100 U |
| Acrylonitrile | 107-13-1 | NE | NE | 5.59 U | 26.4 U | 0.115 U | 0.559 U | 0.116 U | 2.2 U | 100 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Bromoform | 75-25-2 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Bromomethane | 74-83-9 | NE | NE | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.12 U | 5.27 U | 0.012 U | **0.146** | 0.012 U | 0.439 U | 20 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 1.12 U | 5.27 U | 0.012 U | 0.112 U | 0.023 U | 0.439 U | 20 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.28 U | 1.32 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.559 U | 2.64 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 1.12 U | 5.27 U | 0.012 U | 0.112 U | 0.012 U | 0.439 U | 20 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Chloromethane | 74-87-3 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 2-Hexanone | 591-78-6 | NE | NE | 1.12 U | 5.27 U | 0.012 U | 0.112 U | 0.012 U | 0.439 U | 20 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.12 U | 5.27 U | 0.012 U | 0.112 U | 0.012 U | 0.439 U | 20 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.559 U | 2.64 U | 0.012 U | 0.056 U | **0.018 CD** | 0.22 U | 10 U |
| Styrene | 100-42-5 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.28 U | 1.32 U | 0.00573 U | 0.028 U | 0.00582 U | 0.11 U | 5 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.559 U | 2.64 U | 0.00573 U | 0.056 U | 0.00582 U | 0.22 U | 10 U |
| Total VOCs | TVOC | NE | NE | **2.154** | **8.4** | **0.04013** | **0.798** | **0.018** | **0.983** | **1158.3** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **15.6 D** | **85.2 D** | **1.49 D** | **0.169** | **0.101** | **1.12** | **585 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **16.4 D** | **9.37 D** | **0.338 D** | **0.048** | **0.224** | **0.611** | **222 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **32.2 D** | **38.3 D** | **2.6 D** | **0.289** | **0.255** | **0.238** | **427 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **16.1 D** | **20.2 D** | **3.7 D** | **1.14** | **0.822** | **0.231** | **219 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **52.7 D** | **49.5 D** | **11.8 D** | **3.03** | **1.22** | **0.394** | **616 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **54.4 D** | **56.9 D** | **1.28 D** | **0.267** | **0.095** | **1.13** | **575 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **7.53 D** | **25.6 D** | **0.523 D** | **0.09** | **0.444** | **0.309** | **2180 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **2.99 D** | **63.6 D** | **1.58 D** | **0.086** | **0.604** | **0.269** | **4810 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **174 D** | **166 D** | **8.99 D** | **2.3** | **0.86** | **0.909** | **1940 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **129 D** | **112 D** | **11.4 D** | **3.28** | **1.64** | **0.956** | **1160 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **41.2 D** | **43 D** | **7.08 D** | **1.35** | **0.996** | **0.34** | **470 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **26.2 D** | **31.6 D** | **5.2 D** | **1.09** | **0.795** | **0.294** | **389 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **10.7 D** | **14.8 D** | **3.67 D** | **1.49** | **0.806** | **0.158** | **151 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **17.4 D** | **19.1 D** | **4.5 D** | **1.13** | **0.915** | **0.227** | **214 D** |
| Chrysene | 218-01-9 | 110 | 1 | **42.4 D** | **44.3 D** | **7.22 D** | **1.71** | **1.11** | **0.355** | **502 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **4.94 D** | **5.79 D** | **1.33 D** | **0.384** | **0.225** | **0.072** | **54.9 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **11 D** | **13.7 D** | **3.22 D** | **0.927** | **0.652** | **0.197** | **148 D** |
| Total PAHs | TPAH | NE | NE | **654.76** | **798.96** | **75.921** | **18.78** | **11.764** | **7.81** | **14662.9** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP533 | GPEC-TP533 | GPEC-TP534 | GPEC-TP535 | GPEC-TP536 | GPEC-TP537 | GPEC-TP538 |
| | | | Sample Name | GPEC-TP533 (2-3) | GPEC-TP533 (8-9) | GPEC-TP534 | GPEC-TP535 (2-3) | GPEC-TP536 (4-5) | GPEC-TP537 (2-3) | GPEC-TP538 (2-3) |
| | | | Start Depth | 2 | 8 | 4 | 2 | 4 | 2 | 2 |
| | | | End Depth | 3 | 9 | 5 | 3 | 5 | 3 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/18/2017 | 9/18/2017 | 1/9/2018 | 8/25/2017 | 9/15/2017 | 8/25/2017 | 11/15/2017 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 1.8 U | 2.17 U | **0.198 D** | 0.037 U | **0.127** | 0.036 U | 25 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Carbazole | 86-74-8 | NE | NE | 1.8 U | 2.17 U | **0.957 D** | 0.037 U | **0.063** | 0.036 U | **23.6 DJ** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **6.6 D** | **5.32 D** | **0.748 D** | **0.178** | **0.307** | **0.62** | **33 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Hexachloroethane | 67-72-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Isophorone | 78-59-1 | NE | 4.4 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Pyridine | 110-86-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 1.8 U | 2.17 U | 0.187 U | 0.037 U | 0.037 U | 0.036 U | 25 U |
| Total SVOCs | TSVOC | NE | NE | **661.36** | **804.28** | **77.824** | **18.958** | **12.261** | **8.43** | **14719.5** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-TP533 | GPEC-TP533 | GPEC-TP534 | GPEC-TP535 | GPEC-TP536 | GPEC-TP537 | GPEC-TP538 |
| Sample Name | | | | GPEC-TP533 (2-3) | GPEC-TP533 (8-9) | GPEC-TP534 | GPEC-TP535 (2-3) | GPEC-TP536 (4-5) | GPEC-TP537 (2-3) | GPEC-TP538 (2-3) |
| Start Depth | | | | 2 | 8 | 4 | 2 | 4 | 2 | 2 |
| End Depth | | | | 3 | 9 | 5 | 3 | 5 | 3 | 3 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 9/18/2017 | 9/18/2017 | 1/9/2018 | 8/25/2017 | 9/15/2017 | 8/25/2017 | 11/15/2017 |
| Parent Sample Code | | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.065 U | 0.075 U | 0.066 U | 0.065 U | 0.067 U | 0.064 U | 0.116 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.269 U | NA | 0.055 U | 0.054 U | 0.056 U | **0.031 J** | **1.65 DJ** |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.022 U | NA | 0.00437 U | 0.00434 U | **0.00386 J** | **0.00505** | **0.18 D** |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.022 U | NA | 0.00437 U | 0.00434 U | **0.00518** | **0.00479** | **0.153 DJ** |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.022 U | NA | 0.00437 U | 0.00434 U | **0.016** | 0.00424 U | 0.154 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.022 U | NA | 0.00437 U | 0.00434 U | **0.015** | 0.00424 U | 0.154 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.022 U | NA | 0.00437 U | 0.00434 U | **0.01** | 0.00424 U | 0.154 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.022 U | NA | 0.00437 U | 0.00434 U | 0.00449 U | 0.00424 U | 0.154 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.269 U | NA | 0.055 U | 0.054 U | 0.056 U | 0.053 U | 1.93 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.015 U | NA | 0.019 U | 0.018 U | 0.019 U | 0.018 U | 0.095 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.015 U | NA | 0.019 U | 0.018 U | 0.019 U | 0.018 U | 0.095 U |
| Silvex | 93-72-1 | 1000 | | 0.015 U | NA | 0.019 U | 0.018 U | 0.019 U | 0.018 U | 0.095 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4100** | **19000** | **5670** | **20200** | **10900** | **7060** | **914** |
| Antimony | 7440-36-0 | NE | NE | **1.39** | **4.91** | **3.69** | **2.18** | **3.28** | **0.92** | **0.258 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **13** | **13.3** | **9.62** | **7.02** | **7.22** | **2.79** | **6.06** |
| Barium | 7440-39-3 | 10000 | 820 | **125** | **138** | **161** | **422** | **133** | **55.5** | **45.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.6 J** | **0.548 J** | **0.403 J** | **0.481 J** | **0.422 J** | **0.351 J** | 0.527 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.538 J** | **0.481 J** | **1.57** | **0.497 J** | **0.691** | 0.583 U | **0.401 J** |
| Calcium | 7440-70-2 | NE | NE | **1410** | **5470** | **38600** | **11600** | **3450** | **1310** | **306** |
| Chromium | 7440-47-3 | NE | NE | **11.6** | **22.5** | **32.2** | **20.9** | **22.8** | **14** | **5.05** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.12 U | 1.32 U | 1.15 U | 1.12 U | 1.16 U | 1.1 U | 1 U |
| Cobalt | 7440-48-4 | NE | NE | **4.35** | **6.83** | **5.88** | **5.72** | **5.14** | **4.73** | **1.49** |
| Copper | 7440-50-8 | 10000 | 1720 | **334** | **437** | **284** | **469** | **491** | **44** | **42.2** |
| Iron | 7439-89-6 | NE | NE | **11200** | **20900** | **27500** | **17500** | **17700** | **14100** | **2200** |
| Lead | 7439-92-1 | 3900 | 450 | **101** | **307** | **973** | **473** | **318** | **61.8** | **33.1** |
| Magnesium | 7439-95-4 | NE | NE | **953** | **2270** | **8030** | **5130** | **4670** | **1810** | **138** |
| Manganese | 7439-96-5 | 10000 | 2000 | **62.1** | **277** | **310** | **226** | **116** | **261** | **11.7** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.425** | **1.34** | **2.52** | **0.878** | **0.759** | **0.199** | **0.01 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **15.1** | **17.9** | **39.3** | **13.6** | **20.3** | **10.5** | **6.91** |
| Potassium | 7440-09-7 | NE | NE | **502** | **982** | **623** | **893** | **753** | **697** | **164** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.14** | **1.57** | **1.14** | **1.14** | **2.13** | **0.744** | **0.859** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.601 U | 0.69 U | **0.373 J** | **0.854** | **0.325 J** | 0.583 U | 0.527 U |
| Sodium | 7440-23-5 | NE | NE | **67.3** | **60.6 J** | **393** | **202** | **39.8 J** | **59.4** | **55** |
| Thallium | 7440-28-0 | NE | NE | 0.601 U | 0.69 U | 0.614 U | 0.591 U | 0.604 U | 0.583 U | **0.437 J** |
| Vanadium | 7440-62-2 | NE | NE | **23.7** | **26.8** | **75.8** | **27.6** | **46.5** | **22.9** | **19.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **138** | **299** | **595** | **269** | **183** | **68.4** | **22.7** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 3.3 U | 2.9 U | 2.8 U | 2.9 U | 2.7 U | 2.5 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **416000** | **78300** | **75500** | **39100** | **131000** | **13000** | **570000** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP539** | **GPEC-TP 541** | **GPEC-TP542** | **GPEC-TP543** | **GPEC-TP544** | **GPEC-TP545** |
| **Sample Name** | | | | **GPEC-TP539 (1-2)** | **GPEC-TP 541 (4-5)** | **GPEC-TP542 (1-2)** | **GPEC-TP543 (1-2)** | **GPEC-TP544 (2-3)** | **GPEC-TP545 (9-10)** |
| **Start Depth** | | | | **1** | **4** | **1** | **1** | **2** | **9** |
| **End Depth** | | | | **2** | **5** | **2** | **2** | **3** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **12/13/2017** | **12/20/2017** | **10/30/2017** | **11/6/2017** | **8/24/2017** | **9/25/2017** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.658 D** | **0.00271 DJ** | **0.141** | 0.00549 U | 0.00598 U | 0.00581 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.492 D** | 0.00587 U | **0.271** | 0.00549 U | 0.00598 U | 0.00581 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **2.57 D** | **0.00957 D** | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **2.29 D** | **0.019 D** | **0.195** | 0.011 U | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **6.01** | **0.03128** | **0.607** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.443 U | 0.059 U | 0.211 U | 0.055 U | 0.06 U | 0.058 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 2.21 U | 0.117 U | 2.11 U | 0.11 U | 0.12 U | 0.116 U |
| Acrylonitrile | 107-13-1 | NE | NE | 2.21 U | 0.117 U | 1.06 U | 0.11 U | 0.12 U | 0.116 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Bromoform | 75-25-2 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Bromomethane | 74-83-9 | NE | NE | 0.221 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.443 U | 0.012 U | 0.211 U | 0.011 U | 0.012 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.443 U | 0.012 U | 0.211 U | 0.011 U | 0.024 U | 0.012 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.221 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.111 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.443 U | 0.012 U | 0.211 U | 0.011 U | 0.012 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Chloromethane | 74-87-3 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.221 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.443 U | 0.012 U | 0.211 U | 0.011 U | 0.012 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.443 U | 0.012 U | 0.211 U | 0.011 U | 0.012 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.221 U | 0.012 U | 0.106 U | 0.011 U | **0.023 CD** | **0.016 CD** |
| Styrene | 100-42-5 | NE | NE | 0.111 U | 0.00587 U | **0.08** | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.012 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | **0.011 D** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.221 U | 0.00587 U | 0.106 U | 0.011 U | 0.00598 U | 0.00581 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.221 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.111 U | 0.00587 U | 0.053 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.221 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.221 U | 0.00587 U | 0.106 U | 0.00549 U | 0.00598 U | 0.00581 U |
| Total VOCs | TVOC | NE | NE | **6.01** | **0.03128** | **0.687** | ND | **0.023** | **0.027** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **13.4 D** | **1.23 D** | **0.657 D** | 0.035 U | 0.038 U | **0.314 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **8.64 D** | **1.37 D** | **13.5 D** | **0.225** | 0.038 U | **0.854 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **17.8 D** | **3.45 D** | **6.55 D** | **0.119** | 0.038 U | **1.32 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **13.4 D** | **4.14 D** | **18.7 D** | **0.54** | **0.126** | **4.17 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **46.2 D** | **13.2 D** | **27.7 D** | **0.812** | **0.222** | **6.49 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **24.5 D** | **1.94 D** | **3.03 D** | 0.035 U | 0.038 U | **0.601 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **3.12 D** | **0.587 D** | **1.03 D** | **0.036** | 0.038 U | **0.371 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **6.26 D** | **2.38 D** | **0.912 D** | **0.053** | 0.038 U | **0.552 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **99.1 D** | **12.5 D** | **10 D** | **0.325** | **0.109** | **5.93 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **98.2 D** | **13.9 D** | **88.5 D** | **1.28** | **0.311** | **10.6 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **39.2 D** | **6.52 D** | **41 D** | **0.67** | **0.171** | **5.52 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **24.2 D** | **5.73 D** | **29.5 D** | **0.654** | **0.174** | **5.04 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **11.2 D** | **4.36 D** | **13.7 D** | **0.516** | **0.2** | **3.14 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **14.5 D** | **4.29 D** | **19.1 D** | **0.524** | **0.107** | **3.83 D** |
| Chrysene | 218-01-9 | 110 | 1 | **41.9 D** | **6.8 D** | **51.9 D** | **0.886** | **0.195** | **5.7 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **3.53 D** | **1.17 D** | **8.09 D** | **0.127** | 0.038 U | **1.04 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **9.31 D** | **3.26 D** | **15.1 D** | **0.378** | **0.108** | **2.93 D** |
| Total PAHs | TPAH | NE | NE | **474.46** | **86.827** | **348.969** | **7.145** | **1.723** | **58.402** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP539 | GPEC-TP 541 | GPEC-TP542 | GPEC-TP543 | GPEC-TP544 | GPEC-TP545 |
| | | | Sample Name | GPEC-TP539 (1-2) | GPEC-TP 541 (4-5) | GPEC-TP542 (1-2) | GPEC-TP543 (1-2) | GPEC-TP544 (2-3) | GPEC-TP545 (9-10) |
| | | | Start Depth | 1 | 4 | 1 | 1 | 2 | 9 |
| | | | End Depth | 2 | 5 | 2 | 2 | 3 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 12/13/2017 | 12/20/2017 | 10/30/2017 | 11/6/2017 | 8/24/2017 | 9/25/2017 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.72 U | 0.191 U | 0.352 U | **0.59** | 0.038 U | **0.047 DJ** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.72 U | 0.191 U | 0.352 U | **0.1** | 0.038 U | 0.073 U |
| Carbazole | 86-74-8 | NE | NE | **1.12 D** | **1.12 D** | 0.352 U | 0.035 U | 0.038 U | **0.21 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **3.73 D** | **0.615 D** | 0.352 U | 0.035 U | 0.038 U | **0.149 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.72 U | **0.118 DJ** | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | **0.441 DJ** | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Pyridine | 110-86-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.72 U | 0.191 U | 0.352 U | 0.035 U | 0.038 U | 0.073 U |
| Total SVOCs | TSVOC | NE | NE | **479.751** | **88.68** | **348.969** | **7.835** | **1.723** | **58.808** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP539** | **GPEC-TP 541** | **GPEC-TP542** | **GPEC-TP543** | **GPEC-TP544** | **GPEC-TP545** |
| **Sample Name** | | | | **GPEC-TP539 (1-2)** | **GPEC-TP 541 (4-5)** | **GPEC-TP542 (1-2)** | **GPEC-TP543 (1-2)** | **GPEC-TP544 (2-3)** | **GPEC-TP545 (9-10)** |
| **Start Depth** | | | | **1** | **4** | **1** | **1** | **2** | **9** |
| **End Depth** | | | | **2** | **5** | **2** | **2** | **3** | **10** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **12/13/2017** | **12/20/2017** | **10/30/2017** | **11/6/2017** | **8/24/2017** | **9/25/2017** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.063 U | 0.068 U | 0.115 U | 0.116 U | 0.023 U | 0.068 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.522 U | 0.285 U | 0.479 U | 0.485 U | 0.058 U | 0.057 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | **0.00464** |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.042 U | 0.023 U | 0.038 U | 0.039 U | 0.00464 U | 0.00455 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.522 U | 0.285 U | 0.479 U | 0.485 U | 0.058 U | 0.057 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.018 U | 0.019 U | 0.017 U | **0.019** | 0.019 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.018 U | 0.019 U | 0.017 U | 0.018 U | 0.019 U | 0.019 U |
| Silvex | 93-72-1 | 1000 | | 0.018 U | 0.019 U | 0.017 U | 0.018 U | 0.019 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5670** | **6750** | **4490** | **4230** | **19300** | **5880** |
| Antimony | 7440-36-0 | NE | NE | **2.22** | **3.64** | **0.493 J** | **1.5** | **0.846** | **2.24** |
| Arsenic | 7440-38-2 | 16 | 16 | **9.36** | **8.11** | **3.99** | **2.86** | **8.26** | **16.8** |
| Barium | 7440-39-3 | 10000 | 820 | **136** | **82.6** | **48.7** | **23.3** | **73.9** | **145** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.396 J** | 0.63 U | 0.548 U | 0.578 U | **0.474 J** | **0.529 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.741** | **0.685** | 0.548 U | **0.544 J** | 0.6 U | **1.11** |
| Calcium | 7440-70-2 | NE | NE | **6100** | **24400** | **27500** | **1260** | **2020** | **37300** |
| Chromium | 7440-47-3 | NE | NE | **17** | **27.3** | **9.69** | **17.3** | **21.1** | **27.9** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.11 U | 1.17 U | 1.06 U | 1.1 U | 1.2 U | 1.16 U |
| Cobalt | 7440-48-4 | NE | NE | **5.28** | **5.54** | **3.6** | **3.93** | **5.07** | **5.67** |
| Copper | 7440-50-8 | 10000 | 1720 | **248** | **89.5** | **63.8** | **179** | **103** | **131** |
| Iron | 7439-89-6 | NE | NE | **16100** | **31900** | **10200** | **9980** | **15400** | **22900** |
| Lead | 7439-92-1 | 3900 | 450 | **332** | **170** | **46.7** | **146** | **108** | **229** |
| Magnesium | 7439-95-4 | NE | NE | **2270** | **4360** | **1980** | **1800** | **1720** | **7790** |
| Manganese | 7439-96-5 | 10000 | 2000 | **249** | **307** | **211** | **173** | **310** | **284** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.434** | **0.669** | **0.118** | **0.063** | **0.345** | **2.18** |
| Nickel | 7440-02-0 | 10000 | 130 | **25.4** | **24.6** | **9.76** | **23** | **10.9** | **28.3** |
| Potassium | 7440-09-7 | NE | NE | **870** | **924** | **717** | **589** | **584** | **831** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.49** | **0.898** | **1.67** | **0.663** | **0.836** | **1.32** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.568 J** | 0.63 U | 0.548 U | **0.265 J** | **0.317 J** | 0.58 U |
| Sodium | 7440-23-5 | NE | NE | **185** | **332** | **184** | **210** | **59.2 J** | **346** |
| Thallium | 7440-28-0 | NE | NE | **0.237 J** | 0.63 U | 0.548 U | 0.578 U | 0.6 U | 0.58 U |
| Vanadium | 7440-62-2 | NE | NE | **70.3** | **55.7** | **16.8** | **21.7** | **22.5** | **51.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **200** | **237** | **105** | **308** | **54.2** | **312** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.9 U | 2.6 U | 2.7 U | 3 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **359000** | **35000** | **145000** | **41300** | **211000** | **32600** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP546 | GPEC-TP546 | GPEC-TP547 | GPEC-TP548 | GPEC-TP549 | GPEC-TP550 | GPEC-TP551 |
| | | | Sample Name | GPEC-TP546 | GPEC-TP-XX-10252017 | GPEC-TP547 (1-2) | GPEC-TP548 (2-3) | GPEC-TP549 (9.5-10) | GPEC-TP550 (1-2) | GPEC-TP551 (9.5-10) |
| | | | Start Depth | 2.5 | 2.5 | 1 | 2 | 9.5 | 1 | 9.5 |
| | | | End Depth | 3 | 3 | 2 | 3 | 10 | 2 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/25/2017 | 10/25/2017 | 11/7/2017 | 11/8/2017 | 11/10/2017 | 12/7/2017 | 12/12/2017 |
| | | | Parent Sample Code | | GPEC-TP546 | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | **8.96 D** | 0.00535 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.271 U | 0.273 U | 0.00529 U | **0.125 D** | 0.00514 U | **83.1 D** | 0.00535 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | **116 D** | 0.00535 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.542 U | 0.546 U | 0.011 U | **0.501 D** | 0.01 U | **250 D** | 0.011 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | **0.626** | ND | **458.06** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 1.08 U | 1.09 U | 0.053 U | 0.424 U | 0.051 U | 21.8 U | 0.054 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 5.42 U | 5.46 U | 0.106 U | 2.12 U | 0.103 U | 109 U | 0.107 U |
| Acrylonitrile | 107-13-1 | NE | NE | 5.42 U | 5.46 U | 0.106 U | 2.12 U | 0.103 U | 109 U | 0.107 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Bromoform | 75-25-2 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Bromomethane | 74-83-9 | NE | NE | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 1.08 U | 1.09 U | 0.011 U | 0.424 U | 0.01 U | 21.8 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 1.08 U | 1.09 U | 0.011 U | 0.424 U | 0.01 U | 21.8 U | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 1.08 U | 1.09 U | 0.011 U | 0.424 U | 0.01 U | 21.8 U | 0.011 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Chloromethane | 74-87-3 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 2-Hexanone | 591-78-6 | NE | NE | 1.08 U | 1.09 U | 0.011 U | 0.424 U | 0.01 U | 21.8 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 1.08 U | 1.09 U | 0.011 U | 0.424 U | 0.01 U | 21.8 U | 0.011 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.542 U | 0.546 U | 0.011 U | 0.212 U | 0.01 U | 10.9 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.271 U | 0.273 U | **0.018 D** | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.542 U | 0.546 U | 0.011 U | 0.212 U | 0.01 U | 10.9 U | 0.00535 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.271 U | 0.273 U | 0.00529 U | 0.106 U | 0.00514 U | 5.46 U | 0.00535 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.542 U | 0.546 U | 0.00529 U | 0.212 U | 0.00514 U | 10.9 U | 0.00535 U |
| Total VOCs | TVOC | NE | NE | ND | ND | **0.018** | **0.626** | ND | **458.06** | ND |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.829** | **0.841** | **0.936 D** | **16.6 D** | 0.033 U | **286 D** | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **1.05** | **0.837** | **21.6 D** | **61.5 D** | **0.038** | **144 D** | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.5** | **0.912** | **9.42 D** | **46.9 D** | 0.033 U | **351 D** | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **1.91 J** | **1.11 J** | **27.6 D** | **35.1 D** | 0.033 U | **180 D** | 0.036 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **6.27 J** | **3.44 J** | **55.4 D** | **183 D** | **0.052** | **718 D** | 0.036 U |
| Fluorene | 86-73-7 | 1000 | 386 | **1.55** | **1.33** | **7.62 D** | **50.9 D** | 0.033 U | **512 D** | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **1.28** | **1.27** | **5.71 D** | **8.53 D** | 0.033 U | **1390 D** | 0.036 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **1.12** | **1.11** | **1.91 D** | **6.64 D** | 0.033 U | **2260 D** | 0.036 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **5.54** | **4.04** | **10.9 D** | **137 D** | 0.033 U | **1950 D** | 0.036 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **10.9 J** | **5.34 J** | **141 D** | **318 D** | **0.104** | **1480 D** | 0.036 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **4.7 J** | **2.55 J** | **80.8 D** | **131 D** | **0.062** | **418 D** | 0.036 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **2.03** | **1.45** | **61.2 D** | **87.6 D** | **0.054** | **321 D** | 0.036 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **1.7** | **1.04** | **44 D** | **48.3 D** | **0.036** | **166 D** | 0.036 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.02** | **1.3** | **25.7 D** | **41.2 D** | **0.032 J** | **181 D** | 0.036 U |
| Chrysene | 218-01-9 | 110 | 1 | **5.11 J** | **2.93 J** | **96 D** | **148 D** | **0.065** | **370 D** | 0.036 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.441 J** | 0.384 UJ | **13.6 D** | **13.7 D** | 0.033 U | **43.5 D** | 0.036 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **1.42 J** | **0.902 J** | **23.8 D** | **25.7 D** | 0.033 U | **125 D** | 0.036 U |
| Total PAHs | TPAH | NE | NE | **49.37** | **30.402** | **627.196** | **1359.67** | **0.443** | **10895.5** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP546 | GPEC-TP546 | GPEC-TP547 | GPEC-TP548 | GPEC-TP549 | GPEC-TP550 | GPEC-TP551 |
| | | | Sample Name | GPEC-TP546 | GPEC-TP-XX-10252017 | GPEC-TP547 (1-2) | GPEC-TP548 (2-3) | GPEC-TP549 (9.5-10) | GPEC-TP550 (1-2) | GPEC-TP551 (9.5-10) |
| | | | Start Depth | 2.5 | 2.5 | 1 | 2 | 9.5 | 1 | 9.5 |
| | | | End Depth | 3 | 3 | 2 | 3 | 10 | 2 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/25/2017 | 10/25/2017 | 11/7/2017 | 11/8/2017 | 11/10/2017 | 12/7/2017 | 12/12/2017 |
| | | | Parent Sample Code | | GPEC-TP546 | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | **1.71 DJ** | 0.036 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Carbazole | 86-74-8 | NE | NE | 0.362 U | 0.364 U | 0.343 U | **0.665 D** | 0.033 U | **28.3 D** | 0.036 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.806** | **0.549** | **0.466 D** | **2.49 D** | 0.033 U | **116 D** | 0.036 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.362 UJ | 0.364 UJ | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.362 UJ | 0.364 UJ | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.362 UJ | 0.364 UJ | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.362 UJ | 0.364 UJ | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Pyridine | 110-86-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.362 U | 0.364 U | 0.343 U | 0.335 U | 0.033 U | 2.73 U | 0.036 U |
| Total SVOCs | TSVOC | NE | NE | **50.176** | **30.951** | **627.662** | **1362.825** | **0.443** | **11041.51** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP546 | GPEC-TP546 | GPEC-TP547 | GPEC-TP548 | GPEC-TP549 | GPEC-TP550 | GPEC-TP551 |
| | | | Sample Name | GPEC-TP546 | GPEC-TP-XX-10252017 | GPEC-TP547 (1-2) | GPEC-TP548 (2-3) | GPEC-TP549 (9.5-10) | GPEC-TP550 (1-2) | GPEC-TP551 (9.5-10) |
| | | | Start Depth | 2.5 | 2.5 | 1 | 2 | 9.5 | 1 | 9.5 |
| | | | End Depth | 3 | 3 | 2 | 3 | 10 | 2 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/25/2017 | 10/25/2017 | 11/7/2017 | 11/8/2017 | 11/10/2017 | 12/7/2017 | 12/12/2017 |
| | | | Parent Sample Code | | GPEC-TP546 | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.065 U | 0.06 U | 0.114 U | 0.111 U | 0.037 U | 0.12 U | 0.021 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.271 U | 0.25 U | 0.473 U | 0.464 U | 0.091 U | 0.502 U | 0.051 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | **0.035** | **0.027** | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.022 U | 0.02 U | 0.038 U | 0.037 U | 0.0073 U | 0.04 U | 0.0041 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.271 U | 0.25 U | 0.473 U | 0.464 U | 0.091 U | 0.502 U | 0.051 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.017 U | 0.018 U | 0.018 U | 0.087 U | 0.017 U | 0.091 U | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.017 U | 0.018 U | 0.018 U | 0.087 U | 0.017 U | 0.091 U | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.017 U | 0.018 U | 0.018 U | 0.087 U | 0.017 U | 0.091 U | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **9430** | **8410** | **3940** | **3210** | **4150** | **635** | **5440** |
| Antimony | 7440-36-0 | NE | NE | **4.24** | **6.01** | 0.552 U | 0.55 U | 0.539 U | **7.49** | 0.535 U |
| Arsenic | 7440-38-2 | 16 | 16 | **8.74** | **9.1** | **1.34** | **1.39** | **1.06** | **3.06** | **1.47** |
| Barium | 7440-39-3 | 10000 | 820 | **150** | **133** | **25.2** | **22.3** | **28** | **9.53** | **36** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.47 J** | **0.427 J** | **0.351 J** | 0.55 U | 0.539 U | 0.582 U | **0.296 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.497 J** | **0.465 J** | 0.552 U | 0.55 U | 0.539 U | 0.582 U | 0.535 U |
| Calcium | 7440-70-2 | NE | NE | **5710 J** | **9680 J** | **5780** | **953** | **1140** | **1540** | **1770** |
| Chromium | 7440-47-3 | NE | NE | **27.3** | **29.5** | **9.33** | **9.98** | **10.9** | **8.05** | **13.9** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.08 UJ | 1.09 UJ | 1.06 U | 1.06 U | 1.03 U | 1.09 U | 1.07 U |
| Cobalt | 7440-48-4 | NE | NE | **7.4** | **6.63** | **3.99** | **3.5** | **5.03** | **1.56** | **5.24** |
| Copper | 7440-50-8 | 10000 | 1720 | **172** | **156** | **40.1** | **13.2** | **10.8** | **81.1** | **10.6** |
| Iron | 7439-89-6 | NE | NE | **19300** | **19600** | **11700** | **11800** | **15400** | **8290** | **12900** |
| Lead | 7439-92-1 | 3900 | 450 | **180** | **227** | **6.36** | **8.82** | **3.25** | **38.5** | **4.62** |
| Magnesium | 7439-95-4 | NE | NE | **3030** | **2910** | **4000** | **1230** | **1780** | **849** | **2240** |
| Manganese | 7439-96-5 | 10000 | 2000 | **228** | **259** | **268** | **150** | **413** | **61.7** | **303** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.542 J** | **0.052 J** | **0.013 J** | 0.025 U | 0.023 U | **0.083** | 0.027 U |
| Nickel | 7440-02-0 | 10000 | 130 | **24.7** | **23.9** | **9.45** | **7.22** | **9.1** | **8.1** | **13.6** |
| Potassium | 7440-09-7 | NE | NE | **1740** | **1500** | **574** | **421** | **469** | **89.3** | **1010** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.08** | **1.31** | 0.552 U | 0.55 U | **0.263 J** | 0.582 U | **1.42** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.384 J** | **0.376 J** | 0.552 U | 0.55 U | 0.539 U | 0.582 U | 0.535 U |
| Sodium | 7440-23-5 | NE | NE | **196** | **184** | **199** | **153** | **110** | **22.4 J** | **146** |
| Thallium | 7440-28-0 | NE | NE | 0.556 U | 0.575 U | 0.552 U | 0.55 U | 0.539 U | 0.582 U | 0.535 U |
| Vanadium | 7440-62-2 | NE | NE | **42.5** | **37.7** | **17.8** | **26.1** | **15.8** | **14.2** | **19.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **187** | **185** | **41.1** | **21.8** | **23.9** | **64** | **23.5** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.7 U | 2.7 U | 2.6 U | 2.6 U | 2.6 U | 2.7 U | 2.7 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **38500** | **38100** | **10500** | **115000** | 1000 U | **172000** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP552 | GPEC-TP553 | GPEC-TP554 | GPEC-TP555 | GPEC-TP555 | GPEC-TP556 | GPEC-TP557 |
| | | | Sample Name | GPEC-TP552 (7.5-8) | GPEC-TP553 (1-2) | GPEC-TP554 (2-3) | GPEC-TP555 | GPEC-TP-XX-060319 | GPEC-TP556 (3-4) | GPEC-TP557 |
| | | | Start Depth | 7.5 | 1 | 2 | 9.5 | 9.5 | 3 | 1.5 |
| | | | End Depth | 8 | 2 | 3 | 10 | 10 | 4 | 2 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/14/2017 | 11/21/2017 | 11/17/2017 | 6/3/2019 | 6/3/2019 | 8/23/2017 | 5/6/2019 |
| | | | Parent Sample Code | | | | | GPEC-TP555 | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00529 U | **0.095** | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00529 U | **0.521** | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00529 U | **0.201** | **0.538 D** | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | 0.0024 U | 0.00266 U | NA | 0.00238 U |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | 0.0012 U | 0.00133 U | NA | 0.00119 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | **1.49** | **4.11 D** | 0.0024 U | 0.00266 U | 0.012 U | 0.00238 U |
| Total BTEX | TBTEX | NE | NE | ND | **2.307** | **4.648** | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.053 U | 0.211 U | 1.08 U | **0.00681 J** | 0.013 U | 0.062 U | **0.035** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.106 U | 1.05 U | 5.39 U | 0.024 R | 0.027 R | 0.124 U | 0.024 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.106 U | 1.05 U | 5.39 U | 0.024 U | 0.027 U | 0.124 U | 0.024 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Bromoform | 75-25-2 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | 0.211 U | 1.08 U | 0.0024 U | 0.00266 U | 0.012 U | 0.00238 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.011 U | 0.211 U | 1.08 U | 0.0048 R | 0.00532 R | 0.025 U | 0.00476 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.011 U | 0.211 U | 1.08 U | 0.0024 U | 0.00266 U | 0.012 U | 0.00476 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Chloromethane | 74-87-3 | NE | NE | 0.011 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 U | 0.211 U | 1.08 U | 0.0024 U | 0.00266 U | 0.012 U | 0.00238 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.011 U | 0.211 U | 1.08 U | 0.0024 U | 0.00266 U | 0.012 U | 0.00238 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 U | 0.105 U | 0.539 U | 0.0024 U | 0.00266 U | **0.014 CD** | 0.00238 U |
| Styrene | 100-42-5 | NE | NE | 0.00529 U | **0.637** | **0.388 D** | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00529 U | 0.053 U | 0.27 U | 0.0024 U | 0.00266 U | 0.00618 U | 0.00119 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.00182 DJ** | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00529 U | 0.105 U | 0.539 U | 0.006 U | 0.00665 U | 0.00618 U | 0.00119 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | **0.00223** | 0.00618 U | 0.00119 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00529 U | 0.053 U | 0.27 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00529 U | 0.105 U | 0.539 U | 0.0012 U | 0.00133 U | 0.00618 U | 0.00119 U |
| Total VOCs | TVOC | NE | NE | **0.00182** | **2.944** | **5.036** | **0.00681** | **0.00223** | **0.014** | **0.035** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.034 U | **1.11 D** | **23.4 D** | 0.038 U | 0.038 U | **0.079** | **0.044** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.034 U | **15.5 D** | **84.3 D** | 0.038 U | 0.038 U | **0.824** | **0.047** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.034 U | **10.6 D** | **70.5 D** | 0.038 U | 0.038 U | **0.228** | **0.132** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.034 U | **26.8 D** | **27.6 D** | **0.062** | **0.049** | **0.41** | **0.707** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.034 U | **23.3 D** | **111 D** | **0.06** | **0.047** | **0.249** | **1.2** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.034 U | **7.98 D** | **123 D** | 0.038 U | 0.038 U | **0.105** | **0.048** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.034 U | **11 D** | **230 D** | 0.038 U | 0.038 U | **0.084** | **0.037** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.034 U | **12.8 D** | **132 D** | 0.038 U | 0.038 U | **0.159** | **0.062** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.034 U | **28.6 D** | **321 D** | **0.034 J** | 0.038 U | **0.171** | **0.714** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.034 U | **42.7 D** | **167 D** | **0.092** | **0.07** | **0.4** | **1.13** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.034 U | **38.8 D** | **78.8 D** | **0.051** | **0.039** | **0.334** | **0.588** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.034 U | **38 D** | **46.8 D** | **0.057** | **0.05** | **0.183** | **0.768** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.034 U | **20.9 D** | **21.3 D** | **0.052** | **0.046** | **0.916** | **0.774** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.034 U | **22.3 D** | **32.2 D** | **0.051** | **0.044** | **0.735** | **0.604** |
| Chrysene | 218-01-9 | 110 | 1 | 0.034 U | **45.6 D** | **89.1 D** | **0.064** | **0.051** | **0.751** | **0.669** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.034 U | **9.41 D** | **10.5 D** | 0.038 U | 0.038 U | **0.24** | **0.19** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.034 U | **19 D** | **21 D** | **0.047** | **0.039** | **0.5** | **0.571** |
| Total PAHs | TPAH | NE | NE | ND | **374.4** | **1589.3** | **0.57** | **0.435** | **6.368** | **8.285** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP552** | **GPEC-TP553** | **GPEC-TP554** | **GPEC-TP555** | **GPEC-TP555** | **GPEC-TP556** | **GPEC-TP557** |
| **Sample Name** | | | | **GPEC-TP552 (7.5-8)** | **GPEC-TP553 (1-2)** | **GPEC-TP554 (2-3)** | **GPEC-TP555** | **GPEC-TP-XX-060319** | **GPEC-TP556 (3-4)** | **GPEC-TP557** |
| **Start Depth** | | | | **7.5** | **1** | **2** | **9.5** | **9.5** | **3** | **1.5** |
| **End Depth** | | | | **8** | **2** | **3** | **10** | **10** | **4** | **2** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **11/14/2017** | **11/21/2017** | **11/17/2017** | **6/3/2019** | **6/3/2019** | **8/23/2017** | **5/6/2019** |
| **Parent Sample Code** | | | | | | | | **GPEC-TP555** | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.034 U | 0.353 U | **1.1 DJ** | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.373 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.034 U | 0.353 U | **2 D** | 0.038 U | 0.038 U | 0.04 U | **0.06** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.034 U | **0.585 D** | **16 D** | 0.038 U | 0.038 U | **0.149** | **0.032 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.383 U | 0.375 U | 0.04 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.034 U | 0.353 U | 1.79 U | 0.383 U | 0.375 U | 0.04 U | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.034 U | 0.353 U | 1.79 U | 0.038 U | 0.038 U | 0.04 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | ND | **374.985** | **1608.4** | **0.57** | **0.435** | **6.517** | **8.377** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP552 | GPEC-TP553 | GPEC-TP554 | GPEC-TP555 | GPEC-TP555 | GPEC-TP556 | GPEC-TP557 |
| | | | Sample Name | GPEC-TP552 (7.5-8) | GPEC-TP553 (1-2) | GPEC-TP554 (2-3) | GPEC-TP555 | GPEC-TP-XX-060319 | GPEC-TP556 (3-4) | GPEC-TP557 |
| | | | Start Depth | 7.5 | 1 | 2 | 9.5 | 9.5 | 3 | 1.5 |
| | | | End Depth | 8 | 2 | 3 | 10 | 10 | 4 | 2 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 11/14/2017 | 11/21/2017 | 11/17/2017 | 6/3/2019 | 6/3/2019 | 8/23/2017 | 5/6/2019 |
| | | | Parent Sample Code | | | | | GPEC-TP555 | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.038 U | 0.062 U | 0.126 U | 0.022 U | 0.022 U | 0.072 U | 0.00368 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.096 U | 0.155 U | 0.42 U | NA | NA | 0.06 U | 0.0092 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | **0.00107** |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | **0.00268** |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00767 U | 0.012 U | 0.034 U | NA | NA | 0.00477 U | 0.000736 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.096 U | 0.155 U | 0.42 U | NA | NA | 0.06 U | 0.0092 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.017 U | **0.026** | 0.018 U | NA | NA | 0.02 U | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.017 U | 0.017 U | 0.018 U | NA | NA | 0.02 U | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.017 U | 0.017 U | 0.018 U | NA | NA | 0.02 U | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4770** | **8570** | **5770** | **5820 J** | **5480 J** | **5180** | **6550** |
| Antimony | 7440-36-0 | NE | NE | 0.55 U | **0.363 J** | 0.574 U | 0.58 UJ | 0.617 UJ | **2.77** | 0.598 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.49 J** | **2.67** | **1.39** | **1.52 J** | **1.73 J** | **12.1** | **8.48** |
| Barium | 7440-39-3 | 10000 | 820 | **14.3** | **41.1** | **33.6** | **42.3** | **39.9** | **93.8** | **77.3** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.55 U | **0.336 J** | **0.335 J** | **0.305 J** | **0.302 J** | 0.646 U | **0.394 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.55 U | 0.559 U | 0.574 U | 0.58 U | 0.617 U | 0.646 U | **0.385 J** |
| Calcium | 7440-70-2 | NE | NE | **898** | **1490** | **1410** | **1680 J** | **3360 J** | **1200** | **1770** |
| Chromium | 7440-47-3 | NE | NE | **11.1** | **18.6** | **19.8** | **12 J** | **13.1 J** | **15** | **14** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.06 U | 1.06 U | 1.08 U | **1.39** | 1.13 U | 1.24 U | 1.12 U |
| Cobalt | 7440-48-4 | NE | NE | **3.38** | **5.84** | **4.57** | **5.46 J** | **5.08 J** | **2.58** | **4.92** |
| Copper | 7440-50-8 | 10000 | 1720 | **26.6** | **57.6** | **11.5** | **20.9 J** | **24.6 J** | **193** | **107** |
| Iron | 7439-89-6 | NE | NE | **5500** | **11600** | **12000** | **10100 J** | **12500 J** | **18700** | **11400** |
| Lead | 7439-92-1 | 3900 | 450 | **2.7** | **22** | **3.22** | **11.2 J** | **15.6 J** | **115** | **96.3** |
| Magnesium | 7439-95-4 | NE | NE | **1790** | **2390** | **2090** | **2850 J** | **3560 J** | **1090** | **2150** |
| Manganese | 7439-96-5 | 10000 | 2000 | **62.3** | **134** | **167** | **308 J** | **289 J** | **104** | **240** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.025 U | **0.029** | 0.027 U | **0.035** | **0.0317** | **3.73** | **0.57** |
| Nickel | 7440-02-0 | 10000 | 130 | **11.2** | **14.8** | **13.2** | **15.8 J** | **19.2 J** | **9.87** | **14.7** |
| Potassium | 7440-09-7 | NE | NE | **585** | **799** | **1110** | **1240 J** | **1130 J** | **586** | **961** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.41** | **1.27** | **0.72** | 4.06 UJ | 4.32 UJ | **2.95** | 4.19 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.55 U | 0.559 U | 0.574 U | 0.58 UJ | 0.617 UJ | **0.495 J** | **0.514 J** |
| Sodium | 7440-23-5 | NE | NE | **62.6** | **132** | **133** | **274** | **248** | **83.9** | **126** |
| Thallium | 7440-28-0 | NE | NE | 0.55 U | 0.559 U | 0.574 U | 0.58 UJ | 0.617 UJ | 0.646 U | 0.598 U |
| Vanadium | 7440-62-2 | NE | NE | **10.1** | **26.8** | **21.7** | **14.3 J** | **14.4 J** | **25.3** | **24.1** |
| Zinc | 7440-66-6 | 10000 | 2480 | **31.1** | **94.4** | **18.9** | **41.3 J** | **74.2 J** | **29.1** | **92** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.6 U | 2.7 U | 2.7 U | 2.9 U | 2.9 U | **8.7** | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **63500** | **46600** | 1000 U | 1000 U | **172000** | **9860** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-TP559** | **GPEC-TP559** | **GPEC-TP560** | **GPEC-TP561** | **GPEC-TP562** | **GPEC-TP563** |
| **Sample Name** | | | | **GPEC-TP559 (6-7)** | **GPEC-SS-XX-082217** | **GPEC-TP560 (4-5)** | **GPEC-TP561 (1-2)** | **GPEC-TP562** | **GPEC-TP563** |
| **Start Depth** | | | | **6** | **6** | **4** | **1** | **0** | **2** |
| **End Depth** | | | | **7** | **7** | **5** | **2** | **1** | **3** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **8/22/2017** | **8/22/2017** | **8/18/2017** | **8/17/2017** | **9/7/2017** | **9/13/2017** |
| **Parent Sample Code** | | | | | **GPEC-TP559 (6-7)** | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.172** | **0.276** | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.415** | **0.56** | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.324** | **1.04** | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **1.07** | **2.68** | 0.012 U | 0.012 UJ | 0.011 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | **1.981** | **4.556** | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.121 U | 0.257 U | 0.062 U | 0.057 UJ | 0.057 U | 0.058 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.605 U | 1.29 U | 0.124 U | 0.115 R | 0.114 U | 0.115 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.605 U | 1.29 U | 0.124 U | 0.115 UJ | 0.114 U | 0.115 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Bromoform | 75-25-2 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Bromomethane | 74-83-9 | NE | NE | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.121 U | 0.257 U | 0.012 U | 0.012 UJ | 0.011 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.121 U | 0.257 U | 0.025 U | 0.023 UJ | 0.023 U | 0.023 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.121 U | 0.257 U | 0.012 U | 0.012 UJ | 0.011 U | 0.012 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Chloromethane | 74-87-3 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.121 U | 0.257 U | 0.012 U | 0.012 UJ | 0.011 U | 0.012 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.121 U | 0.257 U | 0.012 U | 0.012 UJ | 0.011 U | 0.012 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.061 U | 0.129 U | **0.018 CD** | 0.012 UJ | **0.021 BD** | **0.015 BD** |
| Styrene | 100-42-5 | NE | NE | **0.076** | **0.122** | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.03 U | **0.206** | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.03 U | 0.064 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.061 U | 0.129 U | 0.00619 U | 0.00574 UJ | 0.00572 U | 0.00575 U |
| Total VOCs | TVOC | NE | NE | **2.057** | **4.884** | **0.018** | ND | **0.021** | **0.015** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.075** | 0.04 U | 0.04 U | 0.038 U | **0.15** | **0.742** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.275** | **0.098** | **0.136** | **0.287** | **0.714** | **0.113** |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.086** | **0.045** | 0.04 U | **0.059** | **0.589** | **3.46** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.26** | **0.122** | **0.703** | **0.215** | **2.19** | **4.45** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.453** | **0.208** | 0.04 U | **0.276** | **3.11** | **14.2 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.177** | **0.077** | 0.04 U | 0.038 U | **0.271** | **0.584** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.04 U | 0.04 U | 0.04 U | **0.048** | **0.243** | **0.118** |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.27** | **0.193** | 0.04 U | **0.081** | **0.396** | **0.422** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.634** | **0.276** | 0.04 U | **0.194** | **1.93** | **4.74** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.88** | **0.373** | **0.063** | **0.726** | **3.76** | **12.3 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.438** | **0.169** | **0.16** | **0.318** | **2.19** | **7.43 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.187** | **0.078** | **0.155** | **0.124** | **1.86** | **6.56 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.263** | **0.106** | **0.653** | **0.293** | **1.8** | **4.67** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.337** | **0.165** | **0.568** | **0.314** | **1.75** | **4.06** |
| Chrysene | 218-01-9 | 110 | 1 | **0.534** | **0.236** | **0.397** | **0.512** | **2.65** | **6.34 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.075** | 0.04 U | **0.24** | **0.065** | **0.648** | **1.75** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.206** | **0.101** | **0.655** | **0.206** | **1.72** | **3.68** |
| Total PAHs | TPAH | NE | NE | **5.15** | **2.247** | **3.73** | **3.718** | **25.971** | **75.619** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP559 | GPEC-TP559 | GPEC-TP560 | GPEC-TP561 | GPEC-TP562 | GPEC-TP563 |
| | | | Sample Name | GPEC-TP559 (6-7) | GPEC-SS-XX-082217 | GPEC-TP560 (4-5) | GPEC-TP561 (1-2) | GPEC-TP562 | GPEC-TP563 |
| | | | Start Depth | 6 | 6 | 4 | 1 | 0 | 2 |
| | | | End Depth | 7 | 7 | 5 | 2 | 1 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/22/2017 | 8/22/2017 | 8/18/2017 | 8/17/2017 | 9/7/2017 | 9/13/2017 |
| | | | Parent Sample Code | | GPEC-TP559 (6-7) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.04 U | 0.04 U | 0.04 U | 0.038 UJ | 0.037 U | 0.037 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 UJ | 0.037 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 UJ | 0.037 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | **0.206** | **0.211** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | **0.122** | **0.207** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | **0.145** | **0.807** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | **0.033 J** | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.04 U | 0.04 U | 0.038 UJ | 0.037 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.04 U | 0.04 U | 0.038 U | 0.037 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | **5.15** | **2.247** | **3.73** | **3.718** | **26.477** | **76.844** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP559 | GPEC-TP559 | GPEC-TP560 | GPEC-TP561 | GPEC-TP562 | GPEC-TP563 |
| | | | Sample Name | GPEC-TP559 (6-7) | GPEC-SS-XX-082217 | GPEC-TP560 (4-5) | GPEC-TP561 (1-2) | GPEC-TP562 | GPEC-TP563 |
| | | | Start Depth | 6 | 6 | 4 | 1 | 0 | 2 |
| | | | End Depth | 7 | 7 | 5 | 2 | 1 | 3 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/22/2017 | 8/22/2017 | 8/18/2017 | 8/17/2017 | 9/7/2017 | 9/13/2017 |
| | | | Parent Sample Code | | GPEC-TP559 (6-7) | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.07 U | 0.076 U | 0.071 U | 0.022 U | 0.067 U | 0.065 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.058 U | 0.063 U | 0.059 U | 0.056 U | 0.056 U | 0.054 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00467 U | 0.00506 U | 0.00474 U | 0.00448 U | 0.00446 U | 0.00435 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.058 U | 0.063 U | 0.059 U | 0.056 U | 0.056 U | 0.054 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.02 U | 0.021 U | 0.021 U | 0.019 U | 0.019 U | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.02 U | 0.021 U | 0.021 U | 0.019 U | 0.019 U | 0.019 U |
| Silvex | 93-72-1 | 1000 | | 0.02 U | 0.021 U | 0.021 U | 0.019 U | 0.019 U | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8300** | **8700** | **1320** | **6100** | **38600** | **16400** |
| Antimony | 7440-36-0 | NE | NE | **1.2** | **1.3** | **1.92** | **1.69** | **2.62** | **2.23** |
| Arsenic | 7440-38-2 | 16 | 16 | **12.1** | **10.5** | **2.34** | **10.2** | **13.4** | **4.86** |
| Barium | 7440-39-3 | 10000 | 820 | **71.8** | **82** | **52.1** | **56.7** | **121** | **54.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.336 J** | 0.686 U | 0.665 U | 0.604 U | **0.417 J** | **0.465 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.638 U | 0.686 U | 0.665 U | 0.604 U | **4.82** | **1.6** |
| Calcium | 7440-70-2 | NE | NE | **1660** | **1730** | **711** | **703** | **8250** | **4340** |
| Chromium | 7440-47-3 | NE | NE | **30.3** | **36.6** | **5.54** | **23.4** | **142** | **18.1** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.21 U | 1.29 U | 1.24 U | 1.15 UJ | 1.14 U | 1.15 U |
| Cobalt | 7440-48-4 | NE | NE | **3.14** | **3.3** | **1.62** | **2.28** | **10.4** | **6.13** |
| Copper | 7440-50-8 | 10000 | 1720 | **124** | **114** | **76.4** | **115** | **487** | **1420** |
| Iron | 7439-89-6 | NE | NE | **32200** | **26400** | **8090** | **39300** | **18800** | **21200** |
| Lead | 7439-92-1 | 3900 | 450 | **73** | **112** | **80** | **40.9** | **279** | **195** |
| Magnesium | 7439-95-4 | NE | NE | **1410** | **1430** | **223** | **1600** | **6880** | **6490** |
| Manganese | 7439-96-5 | 10000 | 2000 | **74.7** | **78.4** | **32.3** | **135** | **181** | **217** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.147** | **0.475** | **0.249** | **0.149** | **0.762** | **0.133** |
| Nickel | 7440-02-0 | 10000 | 130 | **11.5** | **11.2** | **8.82** | **6** | **145000 D** | **1820** |
| Potassium | 7440-09-7 | NE | NE | **704** | **762** | **349** | **810** | **563** | **1170** |
| Selenium | 7782-49-2 | 6800 | 4 | **2.6** | **2.55** | **0.705** | **2.37** | **1.96** | **0.575 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.638 U | **0.336 J** | 0.665 U | 0.604 U | **0.552 J** | **0.614** |
| Sodium | 7440-23-5 | NE | NE | **54.8 J** | **49.8 J** | **26.4 J** | **74.3** | **43.3 J** | **44.3 J** |
| Thallium | 7440-28-0 | NE | NE | 0.638 U | 0.686 U | 0.665 U | 0.604 U | 0.589 U | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | **28.1** | **30** | **9.63** | **27** | **41.6** | **26.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **43.7** | **46.2** | **23.8** | **21** | **11600** | **228** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3.2 U | 3.1 U | **7.3** | 2.9 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **7390** | **7250** | **15400** | **8230** | **41800** | **10700** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP564 | GPEC-TP565 | GPEC-TP566 | GPEC-SB516 | GPEC-SB516 | GPEC-SB516 | GPEC-SB517 |
| | | | Sample Name | GPEC-TP564 (5-6) | GPEC-TP565 | GPEC-TP566 (2-3) | GPEC-SB516 | GPEC-SB516 (15.5-16.5) | GPEC-SB516 (69.4-70.4) | GPEC-SB517 |
| | | | Start Depth | 5 | 2 | 2 | 3 | 15.5 | 69.4 | 3 |
| | | | End Depth | 6 | 3 | 3 | 4 | 16.5 | 70.4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/16/2017 | 9/11/2017 | 9/21/2017 | 3/20/2019 | 4/3/2019 | 4/4/2019 | 3/19/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | **0.000442 J** | 0.00125 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.115 U | 0.056 U | **0.038** | 0.00174 U | 0.00107 U | **0.000552 J** | 0.00125 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | **0.000426 J** |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | 0.00348 U | 0.00214 U | 0.00222 U | 0.0025 U |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.23 U | 0.111 U | 0.058 U | 0.00348 U | 0.00214 U | 0.00222 U | 0.0025 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.038** | ND | ND | ND | **0.000994** | **0.000426** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.46 U | 0.223 U | 0.115 U | 0.017 U | **0.076** | **0.022** | **0.037** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 2.3 R | 1.11 U | 1.15 U | 0.035 U | 0.021 U | 0.022 U | 0.025 U |
| Acrylonitrile | 107-13-1 | NE | NE | 2.3 U | 1.11 U | 0.576 U | 0.035 U | 0.021 U | 0.022 U | 0.025 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Bromoform | 75-25-2 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Bromomethane | 74-83-9 | NE | NE | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.46 U | 0.223 U | 0.115 U | 0.00348 U | **0.01** | **0.00204 J** | **0.00455** |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.46 R | 0.223 U | 0.115 U | **0.00487 J** | **0.00511** | 0.00444 U | 0.0025 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | **0.00131** | 0.00111 U | **0.0014** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.23 U | 0.111 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.115 U | 0.056 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.46 U | 0.223 U | 0.115 U | 0.00348 U | 0.00214 U | 0.00222 U | 0.0025 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Chloromethane | 74-87-3 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.46 U | 0.223 U | 0.115 U | 0.00348 U | 0.00214 U | 0.00222 U | 0.0025 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.46 U | 0.223 U | 0.115 U | 0.00348 U | 0.00214 U | 0.00222 U | 0.0025 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.23 U | 0.111 U | 0.058 U | 0.00348 U | **0.00584 C** | **0.00436 C** | **0.00359 C** |
| Styrene | 100-42-5 | NE | NE | 0.115 U | **0.115** | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.115 U | 0.056 U | **0.23** | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.115 U | 0.056 U | 0.029 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.23 U | 0.111 U | 0.058 U | 0.00174 U | 0.00107 U | 0.00111 U | 0.00125 U |
| Total VOCs | TVOC | NE | NE | ND | **0.115** | **0.268** | **0.00487** | **0.09826** | **0.029394** | **0.046966** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.291** | **2.13 D** | 1.86 U | **0.031 J** | **2.65 D** | 0.039 U | **0.362 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.141** | **11.1 D** | **18 D** | 0.043 U | **0.791 D** | 0.039 U | 0.184 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.266** | **9.22 D** | **9.46 D** | **0.091** | **5.54 D** | 0.039 U | **0.582 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.094** | **14.6 D** | **33.1 D** | **0.368** | **7.21 D** | 0.039 U | **1.01 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.543** | **42.1 D** | **113 D** | **0.594** | **22.3 D** | 0.039 U | **2.69 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **0.59** | **7.08 D** | **3.3 D** | **0.029 J** | **2.81 D** | 0.039 U | **0.204 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | **16.8 D** | 1.86 U | 0.043 U | **0.674 D** | 0.039 U | 0.184 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | **16 D** | 1.86 U | 0.043 U | **1.44 D** | 0.039 U | **0.357 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.95** | **53.5 D** | **134 D** | **0.416** | **26.1 D** | 0.039 U | **2.11 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.834** | **73.1 D** | **247 D** | **0.653** | **22.6 D** | 0.039 U | **4.25 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.32** | **32.6 D** | **91.6 D** | **0.356** | **10.1 D** | 0.039 U | **1.31 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.154** | **13.8 D** | **10.7 D** | **0.405** | **9.39 D** | 0.039 U | **1.26 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.105** | **16.5 D** | **35.9 D** | **0.413** | **9.15 D** | 0.039 U | **1.09 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.117** | **17.2 D** | **45.8 D** | **0.309** | **5.22 D** | 0.039 U | **0.883 D** |
| Chrysene | 218-01-9 | 110 | 1 | **0.271** | **37.7 D** | **113 D** | **0.376** | **10 D** | 0.039 U | **1.27 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | **4.51 D** | **10.5 D** | **0.129** | **3.1 D** | 0.039 U | **0.401 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.063** | **11.4 D** | **27.7 D** | **0.327** | **6.02 D** | 0.039 U | **0.909 D** |
| Total PAHs | TPAH | NE | NE | **5.739** | **379.34** | **893.06** | **4.497** | **145.095** | ND | **18.688** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP564 | GPEC-TP565 | GPEC-TP566 | GPEC-SB516 | GPEC-SB516 | GPEC-SB516 | GPEC-SB517 |
| | | | Sample Name | GPEC-TP564 (5-6) | GPEC-TP565 | GPEC-TP566 (2-3) | GPEC-SB516 | GPEC-SB516 (15.5-16.5) | GPEC-SB516 (69.4-70.4) | GPEC-SB517 |
| | | | Start Depth | 5 | 2 | 2 | 3 | 15.5 | 69.4 | 3 |
| | | | End Depth | 6 | 3 | 3 | 4 | 16.5 | 70.4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/16/2017 | 9/11/2017 | 9/21/2017 | 3/20/2019 | 4/3/2019 | 4/4/2019 | 3/19/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 UJ | 0.364 U | 1.86 U | 0.427 U | 2.03 U | 0.391 U | 0.184 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 UJ | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 UJ | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | **0.633 D** | 1.86 U | **0.035 J** | **2.1 D** | 0.039 U | **0.27 D** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.126** | **0.905 D** | 1.86 U | 0.043 U | **1.69 D** | 0.039 U | **0.277 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 UJ | 0.364 U | 1.86 U | **0.041 J** | 0.203 U | 0.039 U | 0.184 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.364 U | 1.86 U | 0.043 U | 0.203 U | 0.039 U | 0.184 U |
| Total SVOCs | TSVOC | NE | NE | **5.865** | **380.878** | **893.06** | **4.573** | **148.885** | ND | **19.235** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-TP564 | GPEC-TP565 | GPEC-TP566 | GPEC-SB516 | GPEC-SB516 | GPEC-SB516 | GPEC-SB517 |
| | | | Sample Name | GPEC-TP564 (5-6) | GPEC-TP565 | GPEC-TP566 (2-3) | GPEC-SB516 | GPEC-SB516 (15.5-16.5) | GPEC-SB516 (69.4-70.4) | GPEC-SB517 |
| | | | Start Depth | 5 | 2 | 2 | 3 | 15.5 | 69.4 | 3 |
| | | | End Depth | 6 | 3 | 3 | 4 | 16.5 | 70.4 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/16/2017 | 9/11/2017 | 9/21/2017 | 3/20/2019 | 4/3/2019 | 4/4/2019 | 3/19/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.065 U | 0.064 U | 0.00416 U | 0.024 U | 0.023 U | 0.00378 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.057 U | 0.054 U | 0.054 U | 0.01 U | NA | NA | 0.00945 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00455 U | 0.00434 U | **0.132** | 0.000832 U | NA | NA | 0.000756 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00455 U | 0.00434 U | 0.00428 U | 0.000832 U | NA | NA | 0.000756 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.057 U | 0.054 U | 0.054 U | 0.01 U | NA | NA | 0.00945 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | 0.018 U | 0.019 U | 0.021 U | NA | NA | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | 0.018 U | 0.019 U | 0.021 U | NA | NA | 0.019 U |
| Silvex | 93-72-1 | 1000 | | 0.019 U | 0.018 U | 0.019 U | 0.021 U | NA | NA | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **12400** | **14600** | **18600** | **7390** | **6840** | **3340** | **10200** |
| Antimony | 7440-36-0 | NE | NE | 0.604 U | **0.936** | **5.99** | 0.678 U | **0.799** | 0.641 U | 0.599 U |
| Arsenic | 7440-38-2 | 16 | 16 | **1.52** | **10** | **26.5** | **7.15** | **23.4** | **1.23** | **7.79** |
| Barium | 7440-39-3 | 10000 | 820 | **47.2** | **51.1** | **500** | **478** | **532** | **34.1** | **298** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.547 J** | 0.593 U | **0.652** | **0.444 J** | **0.315 J** | 0.641 U | **0.432 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.604 U | 0.593 U | **1.31** | **0.925** | **1.79** | 0.641 U | **0.526 J** |
| Calcium | 7440-70-2 | NE | NE | **1210** | **944** | **8570** | **2500** | **22200** | **586** | **1250** |
| Chromium | 7440-47-3 | NE | NE | **25.4** | **18.7** | **34.5** | **21.2** | **131** | **11.6** | **19.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.15 UJ | 1.11 U | 1.15 U | 1.28 U | NA | 1.19 U | 1.14 U |
| Cobalt | 7440-48-4 | NE | NE | **6.38** | **3.26** | **10.3** | **6.68** | **7.55** | **5.98** | **7.69** |
| Copper | 7440-50-8 | 10000 | 1720 | **25** | **59.2** | **620** | **178** | **237** | **5.11** | **160** |
| Iron | 7439-89-6 | NE | NE | **20600** | **22000** | **37800** | **18900** | **26500** | **9960** | **17600** |
| Lead | 7439-92-1 | 3900 | 450 | **4.84** | **78.5** | **550** | **174** | **1880** | **1.76** | **159** |
| Magnesium | 7439-95-4 | NE | NE | **3010** | **1470** | **2820** | **1190** | **3850** | **928** | **2080** |
| Manganese | 7439-96-5 | 10000 | 2000 | **219** | **92.1** | **312** | **295** | **293** | **439** | **190** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.031 U | **0.288** | **4.02** | **0.334** | **1.44** | 0.0266 U | **0.547** |
| Nickel | 7440-02-0 | 10000 | 130 | **16.8** | **13.3** | **34.2** | **15.5** | **29** | **6.67** | **17.1** |
| Potassium | 7440-09-7 | NE | NE | **1600** | **663** | **986** | **717** | **901** | **525** | **798** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.71** | **1.18** | **2.2** | 4.75 U | **2.65 J** | 4.49 U | **4.19 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.604 U | 0.593 U | **0.377 J** | 0.678 U | **0.761** | 0.641 U | 0.599 U |
| Sodium | 7440-23-5 | NE | NE | **66.9** | **25.8 J** | **86.9** | **74.8** | **152** | **169** | **60** |
| Thallium | 7440-28-0 | NE | NE | 0.604 U | 0.593 U | 0.614 U | 0.678 U | 0.651 U | 0.641 U | 0.599 U |
| Vanadium | 7440-62-2 | NE | NE | **30.1** | **26.2** | **33.5** | **23.2** | **20.7** | **11.7** | **24.8** |
| Zinc | 7440-66-6 | 10000 | 2480 | **53.6** | **39.9** | **568** | **472** | **746** | **11.2** | **340** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.8 U | **2.7 J** | 3.2 U | 3.1 U | 3 U | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **1790** | **14500** | **3680** | **33900** | **37400** | **1150** | **13200** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Sample Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Start Depth | 4 | 3 | 15.7 | 62.2 | 3 | 19.5 | 61.5 |
| | | | End Depth | 5 | 4 | 16.7 | 63.2 | 4 | 20 | 62.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/12/2019 | 3/12/2019 | 4/1/2019 | 4/1/2019 | 3/13/2019 | 3/26/2019 | 4/1/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.754** | **0.00212** | **3.33 D** | 0.00109 U | **9.23 D** | 5.52 U | **0.000184 J** |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.208** | **0.000735 J** | 2.38 U | 0.00109 U | **1.38 D** | **20.1 D** | 0.00095 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.28** | 0.00117 U | **263 D** | 0.00109 U | **6.75 D** | **40.7 D** | 0.00095 U |
| m,p-Xylene | 108383/106423 | NE | NE | **0.232** | 0.00234 U | **10.7 D** | 0.00218 U | **2.56 D** | **79.1 D** | 0.0019 U |
| o-Xylene | 95-47-6 | NE | NE | **0.145** | 0.00117 U | **23 D** | 0.00109 U | **2.62 D** | **36.6 D** | 0.00095 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **0.377** | 0.00234 U | **33.7 D** | 0.00218 U | **5.18 D** | **116 D** | 0.0019 U |
| Total BTEX | TBTEX | NE | NE | **1.619** | **0.002855** | **300.03** | ND | **22.54** | **176.5** | **0.000184** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.154 U | 0.012 U | 9.52 U | **0.031** | 1.32 U | 22.1 U | **0.014** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.768 U | 0.023 U | 47.6 U | 0.022 U | 6.6 U | 110 U | 0.019 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.768 U | 0.023 U | 47.6 U | 0.022 U | 6.6 U | 110 U | 0.019 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Bromoform | 75-25-2 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Bromomethane | 74-83-9 | NE | NE | 0.077 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.077 U | 0.00234 U | 9.52 U | 0.00218 U | 1.32 U | 22.1 U | 0.0019 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.077 U | 0.00234 U | 9.52 U | **0.00362 J** | 1.32 U | 22.1 U | 0.0038 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | **0.0011** |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.077 U | 0.00234 U | 9.52 U | 0.00218 U | 1.32 U | 22.1 U | 0.0019 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Chloromethane | 74-87-3 | NE | NE | 0.077 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.384 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.077 U | 0.00234 U | 9.52 U | 0.00218 U | 1.32 U | 22.1 U | 0.0019 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.077 U | 0.00234 U | 9.52 U | 0.00218 U | 1.32 U | 22.1 U | 0.0019 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.077 U | 0.00234 U | 4.76 U | 0.00218 U | 0.66 U | 11 U | 0.0019 U |
| Styrene | 100-42-5 | NE | NE | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | **0.491 DJ** | **48.9 D** | 0.00095 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.077 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.038 U | 0.00117 U | 2.38 U | **0.000336 J** | 0.33 U | 5.52 U | 0.00095 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.038 U | 0.00117 U | 2.38 U | 0.00109 U | 0.33 U | 5.52 U | 0.00095 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.038 U | 0.00117 U | 4.76 U | 0.00109 U | 0.66 U | 11 U | 0.00095 U |
| Total VOCs | TVOC | NE | NE | **1.619** | **0.002855** | **300.03** | **0.034956** | **23.031** | **225.4** | **0.015284** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.436 D** | **0.298 D** | **77.9 D** | 0.038 U | **7.5 D** | **9.32 D** | 0.033 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.178 D** | **0.188 D** | **6.4 D** | 0.038 U | **20.7 D** | **82.8 D** | 0.033 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.977 D** | **0.828 D** | **24.2 D** | 0.038 U | **16.1 D** | **15.8 D** | 0.033 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.91 D** | **2.48 D** | **6.92 D** | 0.038 U | **17.3 D** | **6.34 D** | 0.033 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **5.28 D** | **6.07 D** | **30.8 D** | 0.038 U | **41.4 D** | **17.2 D** | 0.033 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.341 D** | **0.259 D** | **51.1 D** | 0.038 U | **23.9 D** | **36.7 D** | 0.033 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.266 D** | **0.079 DJ** | **332 D** | 0.038 U | **2.31 D** | **404 D** | 0.033 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.865 D** | **0.099 D** | **1190 D** | 0.038 U | **31.5 D** | **1180 D** | 0.033 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **3.83 D** | **4.12 D** | **115 D** | 0.038 U | **78.1 D** | **65 D** | **0.025 J** |
| Pyrene | 129-00-0 | 1000 | 1000 | **4.42 D** | **4.13 D** | **48.1 D** | 0.038 U | **59.5 D** | **35.2 D** | 0.033 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **3.45 D** | **2.73 D** | **20.2 D** | 0.038 U | **25.8 D** | **10.2 D** | 0.033 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **3.59 D** | **2.97 D** | **17.7 D** | 0.038 U | **24.7 D** | **10.3 D** | 0.033 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **3.39 D** | **2.56 D** | **8.05 D** | 0.038 U | **11.4 D** | **4.28 D** | 0.033 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.22 D** | **2.6 D** | **11.1 D** | 0.038 U | **15.8 D** | **6.04 D** | 0.033 U |
| Chrysene | 218-01-9 | 110 | 1 | **3.53 D** | **2.79 D** | **18.7 D** | 0.038 U | **27.8 D** | **10.1 D** | 0.033 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **0.98 D** | **0.824 D** | **2.73 D** | 0.038 U | **5.22 D** | **2.2 D** | 0.033 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **2.43 D** | **2.2 D** | **5.98 D** | 0.038 U | **12.5 D** | **3.9 D** | 0.033 U |
| Total PAHs | TPAH | NE | NE | **39.093** | **35.225** | **1966.88** | ND | **421.53** | **1899.38** | **0.025** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Sample Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Start Depth | 4 | 3 | 15.7 | 62.2 | 3 | 19.5 | 61.5 |
| | | | End Depth | 5 | 4 | 16.7 | 63.2 | 4 | 20 | 62.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/12/2019 | 3/12/2019 | 4/1/2019 | 4/1/2019 | 3/13/2019 | 3/26/2019 | 4/1/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.079 U | 0.08 U | 18.5 U | 0.383 U | 0.731 U | 18.7 U | 0.331 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Carbazole | 86-74-8 | NE | NE | **0.237 D** | **0.28 D** | 1.86 U | 0.038 U | **0.497 DJ** | 1.87 U | 0.033 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.2 D** | 0.08 U | **6.54 D** | 0.038 U | **1.95 D** | **4.57 D** | 0.033 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.383 U | 0.731 U | 18.7 U | 0.331 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.079 U | 0.08 U | 1.86 U | 0.383 U | 0.731 U | 18.7 U | 0.331 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.383 U | 0.731 U | 18.7 U | 0.331 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Pyridine | 110-86-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.079 U | 0.08 U | 1.86 U | 0.038 U | 0.731 U | 1.87 U | 0.033 U |
| Total SVOCs | TSVOC | NE | NE | **39.53** | **35.505** | **1973.42** | ND | **423.977** | **1903.95** | **0.025** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Sample Name | GPEC-SB518 | GPEC-SB519 | GPEC-SB519 | GPEC-SB519 | GPEC-SB520 | GPEC-SB520 | GPEC-SB520 |
| | | | Start Depth | 4 | 3 | 15.7 | 62.2 | 3 | 19.5 | 61.5 |
| | | | End Depth | 5 | 4 | 16.7 | 63.2 | 4 | 20 | 62.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/12/2019 | 3/12/2019 | 4/1/2019 | 4/1/2019 | 3/13/2019 | 3/26/2019 | 4/1/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | 0.035 U | 0.00367 U | 0.00342 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | 0.035 U | 0.00367 U | 0.00342 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | 0.035 U | 0.00367 U | 0.00342 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | **0.051 D** | 0.00367 U | 0.00342 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | 0.035 U | 0.00367 U | 0.00342 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.00374 U | 0.039 U | 0.00374 U | 0.00379 U | 0.035 U | 0.00367 U | 0.00342 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.00374 U | **0.576 D** | 0.00374 U | 0.00379 U | **0.075 D** | 0.00367 U | 0.00342 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.576** | ND | ND | **0.126** | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.047 U | 0.049 U | NA | NA | **0.042 DJ** | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00374 U | 0.00389 U | NA | NA | **0.00643 D** | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00374 U | 0.00389 U | NA | NA | **0.00414 D** | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00374 U | **0.059 D** | NA | NA | 0.00352 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00374 U | **0.012 D** | NA | NA | 0.00352 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00374 U | 0.00389 U | NA | NA | 0.00352 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.047 U | 0.049 U | NA | NA | 0.044 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | 0.02 U | NA | NA | 0.018 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | 0.02 U | NA | NA | 0.018 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | 0.019 U | 0.02 U | NA | NA | 0.018 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4980** | **9020** | **5510** | **2650** | **8550** | **6940** | **2860** |
| Antimony | 7440-36-0 | NE | NE | **1.53** | **0.709** | 0.606 U | 0.58 U | **0.242 J** | 0.594 U | 0.539 U |
| Arsenic | 7440-38-2 | 16 | 16 | **4.52** | **17.6** | **1.52** | **0.655** | **9.72** | **1.02** | **0.681** |
| Barium | 7440-39-3 | 10000 | 820 | **525** | **597** | **35.5** | **28.5** | **336** | **56** | **28** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.251 J** | **0.461 J** | **0.297 J** | 0.58 U | **0.463 J** | 0.594 U | **0.218 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.567 J** | **2.1** | 0.606 U | 0.58 U | **0.748** | 0.594 U | 0.539 U |
| Calcium | 7440-70-2 | NE | NE | **171000 D** | **17200** | **621** | **1120** | **8130** | **1870** | **994** |
| Chromium | 7440-47-3 | NE | NE | **11** | **49.7** | **13.5** | **6.28** | **22.9** | **12.9** | **7.71** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.18 U | **0.513 J** | 1.14 U | 1.16 U | 1.11 U | 1.15 U | 1.04 U |
| Cobalt | 7440-48-4 | NE | NE | **3.22** | **6.84** | **4.07** | **2.95** | **6.26** | **7.71** | **3.77** |
| Copper | 7440-50-8 | 10000 | 1720 | **148** | **205** | **10.5** | **7.97** | **162** | **19.9** | **8.09** |
| Iron | 7439-89-6 | NE | NE | **9780** | **27100** | **8220** | **7820** | **20800** | **14600** | **9090** |
| Lead | 7439-92-1 | 3900 | 450 | **459** | **5170** | **3.16** | **1.92** | **621** | **2.6** | **2.69** |
| Magnesium | 7439-95-4 | NE | NE | **3000** | **2820** | **1720** | **1310** | **3170** | **3140** | **1660** |
| Manganese | 7439-96-5 | 10000 | 2000 | **219** | **1120** | **159** | **162** | **264** | **390** | **260** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.936** | **1.95** | 0.0279 U | 0.029 U | **0.119 DJ** | 0.0252 U | 0.0232 U |
| Nickel | 7440-02-0 | 10000 | 130 | **15** | **24.5** | **10** | **5.68** | **22.5** | **12** | **7.98** |
| Potassium | 7440-09-7 | NE | NE | **785** | **964** | **685** | **592** | **1020** | **2110** | **569** |
| Selenium | 7782-49-2 | 6800 | 4 | **4.82** | **3.88 J** | 4.24 U | 4.06 U | **4.68** | 4.16 U | 3.78 U |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.517 J** | **0.396 J** | 0.606 U | 0.58 U | **0.348 J** | 0.594 U | 0.539 U |
| Sodium | 7440-23-5 | NE | NE | **915** | **497** | **148** | **154** | **957** | **262** | **232** |
| Thallium | 7440-28-0 | NE | NE | 0.636 U | 0.643 U | 0.606 U | 0.58 U | 0.578 U | 0.594 U | 0.539 U |
| Vanadium | 7440-62-2 | NE | NE | **13.3** | **101** | **14.8** | **9.31** | **34.3** | **33.5** | **9.01** |
| Zinc | 7440-66-6 | 10000 | 2480 | **383** | **1490** | **34.3** | **12.6** | **312** | **27.5** | **15.5** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3 U | 2.8 U | 2.9 U | 2.8 U | 2.9 U | 2.6 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **23100** | **107000** | **19500** | 1000 U | **53100** | **7330** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB523 |
| | | | Sample Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 (30-31) | GPEC-SB-XX-041819 | GPEC-SB522 (85-86) | GPEC-SB523 |
| | | | Start Depth | 4 | 3 | 30 | 30 | 85 | 3 |
| | | | End Depth | 5 | 4 | 31 | 31 | 86 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/13/2019 | 3/22/2019 | 4/18/2019 | 4/18/2019 | 4/18/2019 | 3/14/2019 |
| | | | Parent Sample Code | | | | GPEC-SB522 (30-31) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **4.08 D** | **6.34** | **0.136 J** | **0.47 J** | **0.000252 J** | **0.579** |
| Toluene | 108-88-3 | 1000 | 0.7 | **2.96 D** | **0.156** | **0.018 J** | 0.066 U | **0.000352 J** | **0.561** |
| Ethylbenzene | 100-41-4 | 780 | 1 | **4.51 D** | **10.5** | **0.062** | **0.115** | 0.00076 U | **0.143** |
| m,p-Xylene | 108383/106423 | NE | NE | **5.56 D** | **1.61** | 0.09 U | 0.132 U | 0.00152 U | **0.348** |
| o-Xylene | 95-47-6 | NE | NE | **3.15 D** | **0.346** | 0.045 UJ | **0.172 J** | 0.00076 U | **0.122** |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | **8.7 D** | **1.96** | 0.09 UJ | **0.172 J** | 0.00152 U | **0.47** |
| Total BTEX | TBTEX | NE | NE | **20.26** | **18.952** | **0.216** | **0.757** | **0.000604** | **1.753** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 3.11 U | 0.212 U | 0.179 U | 0.263 U | **0.025** | 0.242 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 15.5 U | 1.06 U | 0.897 R | 1.32 R | 0.015 R | 1.21 U |
| Acrylonitrile | 107-13-1 | NE | NE | 15.5 U | 1.06 U | 0.897 U | 1.32 U | 0.015 U | 1.21 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Bromoform | 75-25-2 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Bromomethane | 74-83-9 | NE | NE | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 3.11 U | 0.212 U | 0.179 U | 0.263 U | 0.00152 U | 0.242 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 3.11 U | 0.212 U | 0.179 U | 0.263 U | **0.00253 J** | 0.242 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | **0.00282** | 0.06 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 3.11 U | 0.212 U | 0.179 U | 0.263 U | 0.00304 R | 0.242 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Chloromethane | 74-87-3 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 2-Hexanone | 591-78-6 | NE | NE | 3.11 U | 0.212 U | 0.179 U | 0.263 U | 0.00152 U | 0.242 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 3.11 U | 0.212 U | 0.179 U | 0.263 U | 0.00152 U | 0.242 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00152 U | 0.121 U |
| Styrene | 100-42-5 | NE | NE | **0.912 DJ** | **0.093 J** | 0.09 U | 0.132 U | 0.00076 U | **0.312** |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.777 U | 0.053 U | 0.045 U | 0.066 U | 0.00076 U | 0.06 U |
| Vinyl acetate | 108-05-4 | NE | NE | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 1.55 U | 0.106 U | 0.09 U | 0.132 U | 0.00076 U | 0.121 U |
| Total VOCs | TVOC | NE | NE | **21.172** | **19.045** | **0.216** | **0.757** | **0.030954** | **2.065** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **3.33 D** | **1.38 D** | **21.8** | **22** | **0.041** | **3.05 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **9.58 D** | **3.91 D** | **13.5** | **12.7** | **0.075** | **6.62 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **5.82 D** | **5.26 D** | **17** | **17.2** | 0.035 U | **9.07 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **5.6 D** | **7.34 D** | **6.01** | **7.07** | 0.035 U | **13.2 D** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **12.7 D** | **14.4 D** | **42.2** | **40.1** | 0.035 U | **29.9 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **9.53 D** | **5.16 D** | **13.5** | **14.8** | **0.03 J** | **7.81 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **42.6 D** | **0.606 D** | **2.03** | **1.9** | **0.038** | **1.89 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **85.2 D** | **0.8 D** | **9.18 J** | **0.727 J** | **0.713** | **2.64 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **22.1 D** | **26.2 D** | **12.3** | **14.1** | 0.035 U | **44.6 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **17.1 D** | **25.8 D** | **60.3** | **55.3** | 0.035 U | **49.2 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **9.36 D** | **9.1 D** | **23.1** | **20.9** | 0.035 U | **18.5 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **8.3 D** | **10.1 D** | **20** | **18.5** | 0.035 U | **18.5 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **5.47 D** | **6 D** | **7.16** | **9.41** | 0.035 U | **8.96 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **4.93 D** | **5.39 D** | **12** | **9.28** | 0.035 U | **12.1 D** |
| Chrysene | 218-01-9 | 110 | 1 | **10.7 D** | **10.2 D** | **22.2** | **19.5** | 0.035 U | **19.2 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **2.49 D** | **2.63 D** | **2.94** | **1.45** | 0.035 U | **4.07 D** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **4.49 D** | **4.93 D** | **4.86** | **5.07** | 0.035 U | **9.41 D** |
| Total PAHs | TPAH | NE | NE | **259.3** | **139.206** | **290.08** | **270.007** | **0.897** | **258.72** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB523 |
| | | | Sample Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 (30-31) | GPEC-SB-XX-041819 | GPEC-SB522 (85-86) | GPEC-SB523 |
| | | | Start Depth | 4 | 3 | 30 | 30 | 85 | 3 |
| | | | End Depth | 5 | 4 | 31 | 31 | 86 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/13/2019 | 3/22/2019 | 4/18/2019 | 4/18/2019 | 4/18/2019 | 3/14/2019 |
| | | | Parent Sample Code | | | | GPEC-SB522 (30-31) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.74 U | 3.56 U | 8.49 U | 8.85 U | 0.35 U | 0.364 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Carbazole | 86-74-8 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | **0.29 DJ** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.902 D** | **0.534 D** | **0.551 J** | **1.69** | 0.035 U | **1.26 D** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.74 U | 0.356 U | 8.49 U | 8.85 U | 0.35 U | 0.364 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.74 U | 0.356 U | 8.49 U | 8.85 U | 0.35 U | 0.364 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Pyridine | 110-86-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.74 U | 0.356 U | 0.849 U | 0.885 U | 0.035 U | 0.364 U |
| Total SVOCs | TSVOC | NE | NE | **260.202** | **139.74** | **290.631** | **271.697** | **0.897** | **260.27** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB522 | GPEC-SB523 |
| | | | Sample Name | GPEC-SB521 | GPEC-SB522 | GPEC-SB522 (30-31) | GPEC-SB-XX-041819 | GPEC-SB522 (85-86) | GPEC-SB523 |
| | | | Start Depth | 4 | 3 | 30 | 30 | 85 | 3 |
| | | | End Depth | 5 | 4 | 31 | 31 | 86 | 4 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/13/2019 | 3/22/2019 | 4/18/2019 | 4/18/2019 | 4/18/2019 | 3/14/2019 |
| | | | Parent Sample Code | | | | GPEC-SB522 (30-31) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.00354 U | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | 0.035 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.00354 U | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | 0.035 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.00354 U | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | 0.035 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.00354 U | **0.117** | 0.02 U | 0.02 U | 0.02 U | **0.128 D** |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.00354 U | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | 0.035 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.011** | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | **0.061 D** |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.012** | 0.00356 U | 0.02 U | 0.02 U | 0.02 U | 0.035 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.023** | **0.117** | ND | ND | ND | **0.189** |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.044 U | 0.018 U | NA | NA | NA | 0.044 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00354 U | 0.00142 U | NA | NA | NA | 0.00353 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.044 U | 0.018 U | NA | NA | NA | 0.044 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | 0.018 U | NA | NA | NA | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | 0.018 U | NA | NA | NA | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.019 U | 0.018 U | NA | NA | NA | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **7550** | **6970** | **2910** | **3540** | **3460 J** | **8220** |
| Antimony | 7440-36-0 | NE | NE | **0.314 J** | 0.582 U | 0.572 U | 0.563 U | 0.577 U | 0.598 U |
| Arsenic | 7440-38-2 | 16 | 16 | **15.4** | **4.9** | **1.03** | **1.9** | **17.8** | **13.2** |
| Barium | 7440-39-3 | 10000 | 820 | **206** | **77.9** | **19** | **28.8** | **24.4** | **148** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.46 J** | **0.373 J** | **0.191 J** | **0.244 J** | **0.528 J** | **0.561 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.919** | 0.582 U | 0.572 U | 0.563 U | 0.577 U | **0.762** |
| Calcium | 7440-70-2 | NE | NE | **5200** | **2620** | **1600** | **1940** | **5200 J** | **10600** |
| Chromium | 7440-47-3 | NE | NE | **27.6** | **13.9** | **9.46** | **11.7** | **14** | **22** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.12 U | 1.08 U | 1.08 U | 1.08 U | 1.08 U | **0.68 J** |
| Cobalt | 7440-48-4 | NE | NE | **7.2** | **5.82** | **4.86** | **6.56** | **12.6** | **7.13** |
| Copper | 7440-50-8 | 10000 | 1720 | **167** | **123** | **13.2** | **17.4** | **12.1** | **191** |
| Iron | 7439-89-6 | NE | NE | **29200** | **12900** | **10600** | **13300** | **103000** | **20200** |
| Lead | 7439-92-1 | 3900 | 450 | **597** | **126** | **2.98** | **3.44** | **6.2** | **303** |
| Magnesium | 7439-95-4 | NE | NE | **2410** | **2500** | **2100** | **2980** | **5350 J** | **3700** |
| Manganese | 7439-96-5 | 10000 | 2000 | **518** | **290** | **91.8** | **128** | **2140** | **273** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.21** | **0.431** | **0.858** | **0.939** | 0.026 U | **0.5** |
| Nickel | 7440-02-0 | 10000 | 130 | **35.2** | **14.7** | **11.1** | **14.4** | **15.4** | **24.3** |
| Potassium | 7440-09-7 | NE | NE | **1130** | **1090** | **651** | **1030** | **757 J** | **1150** |
| Selenium | 7782-49-2 | 6800 | 4 | **4.8** | 4.07 U | 4 U | 3.94 U | 4.04 U | **4.21** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.409 J** | 0.582 U | 0.572 U | 0.563 U | 0.577 U | 0.598 U |
| Sodium | 7440-23-5 | NE | NE | **292** | **241** | **223** | **293** | **505 J** | **182** |
| Thallium | 7440-28-0 | NE | NE | 0.588 U | 0.582 U | 0.572 U | 0.563 U | **0.295 J** | 0.598 U |
| Vanadium | 7440-62-2 | NE | NE | **24.7** | **25** | **13.6** | **17.1** | **25.1** | **45.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **344** | **113** | **20.9** | **23.6** | **45** | **303** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.7 U | 2.7 U | 2.7 U | 2.7 U | 2.8 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **47200** | **36700** | **42700** | **40900** | **6310** | **76500** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB524 | GPEC-SB524 | GPEC-SB524 | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Sample Name | GPEC-SB524 | GPEC-SB524 (39-40) | GPEC-SB524 (79-80) | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Start Depth | 4 | 39 | 79 | 2 | 1 | 5 | 21 |
| | | | End Depth | 5 | 40 | 80 | 3 | 2 | 6 | 22 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/11/2019 | 4/17/2019 | 4/17/2019 | 3/29/2019 | 3/11/2019 | 3/14/2019 | 4/2/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.000422 J** | **0.015** | 0.00093 U | **0.271 DJ** | **0.000696 J** | **1.1** | 1.82 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.00033 J** | **0.0005 J** | **0.000497 J** | **1.17 D** | **0.000581 J** | **0.033 J** | 1.82 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00124 U | **0.000831 J** | 0.00093 U | **3.43 D** | 0.00168 U | **3.21** | **60.7 D** |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00248 U | 0.00254 U | 0.00186 U | **5.9 D** | 0.00336 U | **0.162** | **8.35 D** |
| o-Xylene | 95-47-6 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | **8.12 D** | 0.00168 U | 0.059 U | **14.5 D** |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00248 U | 0.00254 U | 0.00186 U | **14 D** | 0.00336 U | **0.209** | **22.8 D** |
| Total BTEX | TBTEX | NE | NE | **0.000752** | **0.016331** | **0.000497** | **18.891** | **0.001277** | **4.505** | **83.55** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.017** | **0.03** | **0.044** | 2.64 U | **0.016 J** | 0.234 U | 7.29 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.025 U | 0.025 R | 0.019 R | 13.2 U | 0.034 U | 1.17 U | 36.5 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.025 U | 0.025 U | 0.019 U | 13.2 U | 0.034 U | 1.17 U | 36.5 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Bromoform | 75-25-2 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00248 U | 0.00254 U | 0.00186 U | 2.64 U | 0.00336 U | 0.234 U | 7.29 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.00248 U | 0.00508 R | 0.00372 R | 2.64 U | 0.00336 U | 0.234 U | 7.29 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00124 U | 0.00127 U | **0.00116** | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00248 U | 0.00508 R | 0.00372 R | 2.64 U | 0.00336 U | 0.234 U | 7.29 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00124 U | 0.00127 U | **0.00098** | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00248 U | 0.00254 U | 0.00186 U | 2.64 U | 0.00336 U | 0.234 U | 7.29 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00248 U | 0.00254 U | 0.00186 U | 2.64 U | 0.00336 U | 0.234 U | 7.29 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.00248 U | 0.00254 U | 0.00186 U | 1.32 U | 0.00336 U | 0.117 U | 3.65 U |
| Styrene | 100-42-5 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.000594 J** | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00124 U | 0.00127 U | **0.00027 J** | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00124 U | 0.00127 U | 0.00093 U | 0.66 U | 0.00168 U | 0.059 U | 1.82 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00124 U | 0.00127 U | 0.00093 U | 1.32 U | 0.00168 U | 0.117 U | 3.65 U |
| Total VOCs | TVOC | NE | NE | **0.018346** | **0.046331** | **0.046907** | **18.891** | **0.017277** | **4.505** | **83.55** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **2.09 D** | 0.037 U | 0.037 U | **16.2 D** | **0.288 J** | **0.136** | **21.9 D** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **3.1 D** | 0.037 U | 0.037 U | **69.9 D** | **5.89** | **0.295** | **2.46 D** |
| Anthracene | 120-12-7 | 1000 | 1000 | **7.65 D** | 0.037 U | 0.037 U | **53 D** | **2.76** | **0.29** | **5.45 D** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **27.8 D** | 0.037 U | 0.037 U | **22.4 D** | **21.4** | **0.619** | 1.72 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **45.4 D** | 0.037 U | 0.037 U | **68.1 D** | **5.36** | **1.17** | **8.34 D** |
| Fluorene | 86-73-7 | 1000 | 386 | **3.3 D** | 0.037 U | 0.037 U | **78.6 D** | **1.18** | **0.289** | **9.74 D** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **2.07 D** | **0.056** | **0.038** | **168 D** | **2.11** | **0.225** | **76.9 D** |
| Naphthalene | 91-20-3 | 1000 | 12 | **3.36 D** | **0.753** | **2.31** | **200 D** | **1.5** | **0.304** | **199 D** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **32.7 D** | 0.037 U | 0.037 U | **211 D** | **3** | **1.27** | **21.5 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | **49.9 D** | 0.037 U | **0.035 J** | **109 D** | **12.3** | **1.37** | **10.6 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **24 D** | 0.037 U | 0.037 U | **47.9 D** | **7.82** | **0.732** | **4.11 D** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **29.4 D** | 0.037 U | 0.037 U | **48.8 D** | **19.1** | **0.756** | **4.14 D** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **23.5 D** | 0.037 U | 0.037 U | **22.5 D** | **13** | **0.464** | **1.9 D** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **21 D** | 0.037 U | 0.037 U | **28.5 D** | **12.9** | **0.548** | **2.7 D** |
| Chrysene | 218-01-9 | 110 | 1 | **25.8 D** | 0.037 U | 0.037 U | **50.7 D** | **12** | **0.861** | **4.88 D** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **8.53 D** | 0.037 U | 0.037 U | **10.6 D** | **6.32** | **0.144** | 1.72 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **21.4 D** | 0.037 U | 0.037 U | **18.2 D** | **14.7** | **0.474** | **1.33 DJ** |
| Total PAHs | TPAH | NE | NE | **331** | **0.809** | **2.383** | **1223.4** | **141.628** | **9.947** | **374.95** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB524 | GPEC-SB524 | GPEC-SB524 | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Sample Name | GPEC-SB524 | GPEC-SB524 (39-40) | GPEC-SB524 (79-80) | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Start Depth | 4 | 39 | 79 | 2 | 1 | 5 | 21 |
| | | | End Depth | 5 | 40 | 80 | 3 | 2 | 6 | 22 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/11/2019 | 4/17/2019 | 4/17/2019 | 3/29/2019 | 3/11/2019 | 3/14/2019 | 4/2/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.384 U | 0.365 U | 0.372 U | 18.4 U | 0.312 U | 0.036 U | 17.2 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Carbazole | 86-74-8 | NE | NE | **1.59 D** | 0.037 U | 0.037 U | **1.92 D** | 0.312 U | **0.059** | 1.72 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.963 D** | 0.037 U | 0.037 U | **9.23 D** | 0.312 U | **0.06** | 1.72 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.384 U | 0.365 U | 0.372 U | 18.4 U | 0.312 U | 0.036 U | 17.2 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.384 U | 0.365 U | 0.372 U | 18.4 U | 0.312 U | 0.036 U | 17.2 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 18.4 U | 0.312 U | 0.036 U | 17.2 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Pyridine | 110-86-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.384 U | 0.037 U | 0.037 U | 1.84 U | 0.312 U | 0.036 U | 1.72 U |
| Total SVOCs | TSVOC | NE | NE | **333.553** | **0.809** | **2.383** | **1234.55** | **141.628** | **10.066** | **374.95** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB524 | GPEC-SB524 | GPEC-SB524 | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Sample Name | GPEC-SB524 | GPEC-SB524 (39-40) | GPEC-SB524 (79-80) | GPEC-SB525 | GPEC-SB526 | GPEC-SB527 | GPEC-SB527 |
| | | | Start Depth | 4 | 39 | 79 | 2 | 1 | 5 | 21 |
| | | | End Depth | 5 | 40 | 80 | 3 | 2 | 6 | 22 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/11/2019 | 4/17/2019 | 4/17/2019 | 3/29/2019 | 3/11/2019 | 3/14/2019 | 4/2/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.037 U | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.037 U | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.037 U | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.037 U | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | **0.00596** | 0.00343 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | **0.102 D** | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | **0.165 D** | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.037 U | 0.022 U | 0.022 U | 0.018 U | 0.00411 U | 0.00348 U | 0.00343 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.267** | ND | ND | ND | ND | **0.00596** | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | **0.095 D** | NA | NA | 0.441 U | 0.051 U | 0.044 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | **0.0099 D** | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | **0.00798 D** | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | **0.00859 D** | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | **0.016 D** | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | **0.046 D** | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.0037 U | NA | NA | 0.035 U | 0.00411 U | 0.00348 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.046 U | NA | NA | 0.441 U | 0.051 U | 0.044 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.019 U | NA | NA | 0.019 U | 0.02 U | 0.018 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.019 U | NA | NA | 0.019 U | 0.02 U | 0.018 U | NA |
| Silvex | 93-72-1 | 1000 | | 0.019 U | NA | NA | 0.019 U | 0.02 U | 0.018 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8320** | **2340** | **3210** | **7500** | **4860** | **6190** | **3070** |
| Antimony | 7440-36-0 | NE | NE | 0.614 U | 0.609 U | 0.622 U | **0.383 J** | **0.334 J** | 0.577 U | 0.555 U |
| Arsenic | 7440-38-2 | 16 | 16 | **11** | **0.667** | **1.11** | **9.5** | **16.1** | **5.31** | **1.17** |
| Barium | 7440-39-3 | 10000 | 820 | **157** | **20.2** | **41** | **197** | **123** | **80.1** | **15.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.451 J** | 0.609 U | **0.28 J** | **0.452 J** | **0.815** | **0.327 J** | **0.18 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.938** | 0.609 U | 0.622 U | **0.492 J** | **0.641 J** | **0.615** | 0.555 U |
| Calcium | 7440-70-2 | NE | NE | **37500** | **1100** | **9370** | **4860** | **6900** | **1560** | **1700** |
| Chromium | 7440-47-3 | NE | NE | **20.6** | **7.29** | **9.84** | **16.2** | **14.6** | **34.6** | **6.33** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **0.703 J** | 1.15 U | 1.16 U | 1.12 U | 1.25 U | 1.09 U | 1.07 U |
| Cobalt | 7440-48-4 | NE | NE | **5.58** | **3.72** | **4.74** | **5.99** | **5.63** | **5.43** | **3.15** |
| Copper | 7440-50-8 | 10000 | 1720 | **126** | **9.91** | **10.6** | **125** | **144** | **95.2** | **9.02** |
| Iron | 7439-89-6 | NE | NE | **21900** | **6850** | **11400** | **15400** | **26900** | **12700** | **10900** |
| Lead | 7439-92-1 | 3900 | 450 | **409** | **2.39** | **2.86** | **166** | **110** | **101** | **2.61** |
| Magnesium | 7439-95-4 | NE | NE | **9320** | **1490** | **4830** | **2630** | **2850** | **2090** | **1580** |
| Manganese | 7439-96-5 | 10000 | 2000 | **220** | **105** | **334** | **227** | **176** | **173** | **513** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **1.24** | 0.0261 U | 0.0254 U | **0.602** | **0.556** | **0.111** | 0.0235 U |
| Nickel | 7440-02-0 | 10000 | 130 | **26.7** | **7.6** | **9.69** | **23.3** | **32.5** | **17.5** | **6.74** |
| Potassium | 7440-09-7 | NE | NE | **1020** | **549** | **984** | **810** | **520** | **864** | **433** |
| Selenium | 7782-49-2 | 6800 | 4 | **3.26 J** | 4.26 U | 4.36 U | **1.97 J** | **3.05 J** | **3.35 J** | 3.88 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.614 U | 0.609 U | 0.622 U | 0.583 U | 0.646 U | 0.577 U | 0.555 U |
| Sodium | 7440-23-5 | NE | NE | **708** | **132** | **192** | **161** | **256** | **69.2** | **256** |
| Thallium | 7440-28-0 | NE | NE | 0.614 U | 0.609 U | 0.622 U | **0.402 J** | 0.646 U | 0.577 U | 0.555 U |
| Vanadium | 7440-62-2 | NE | NE | **88.3** | **10.3** | **13.7** | **86** | **62.9** | **21.8** | **14.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **305** | **13.8** | **17.7** | **200** | **145** | **224** | **13.8** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.9 U | 2.9 U | 2.8 U | 3.1 U | 2.7 U | 2.7 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **120000** | 1000 U | **9410** | **36100** | **317000** | **9110** | **51600** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| **Location Name** | | | | **GPEC-SB527** | **GPEC-SB528** | **GPEC-SB529** | **GPEC-SB529** | **GPEC-SB529** | **GPEC-SB529** | **GPEC-SB529** |
| **Sample Name** | | | | **GPEC-SB527 (75.4-76.4)** | **GPEC-SB528** | **GPEC-SB529** | **GPEC-SB-XX-030819** | **GPEC-SB-XX-040319** | **GPEC-SB529 (11-12)** | **GPEC-SB529 (79-80)** |
| **Start Depth** | | | | **75.4** | **0.5** | **0.5** | **0.5** | **11** | **11** | **79** |
| **End Depth** | | | | **76.4** | **1.5** | **1.5** | **1.5** | **12** | **12** | **80** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/3/2019** | **3/15/2019** | **3/8/2019** | **3/8/2019** | **4/3/2019** | **4/3/2019** | **4/3/2019** |
| **Parent Sample Code** | | | | | | | **GPEC-SB529** | **GPEC-SB529 (11-12)** | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.000203 J** | 0.00065 U | **0.415 D** | **0.262 D** | **0.048** | **0.036** | 0.00082 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.000318 J** | 0.00065 U | **1.12 D** | **0.683 D** | **0.097** | **0.079** | 0.00082 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | **0.000809 J** | 0.00065 U | **1.49 D** | **0.675 D** | **0.147** | **0.118** | **0.000383 J** |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00174 U | 0.0013 U | **1.95 D** | **0.931 D** | **0.189** | **0.144** | 0.00164 U |
| o-Xylene | 95-47-6 | NE | NE | 0.00087 U | 0.00065 U | **1.18 D** | **0.522 D** | **0.125** | **0.087** | 0.00082 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00174 U | 0.0013 U | **3.13 D** | **1.45 D** | **0.314** | **0.232** | 0.00164 U |
| Total BTEX | TBTEX | NE | NE | **0.00133** | ND | **6.155** | **3.073** | **0.606** | **0.464** | **0.000383** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.011** | 0.0065 U | 0.51 U | 0.461 U | 0.077 U | 0.1 U | **0.022** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.017 U | 0.013 U | 2.55 U | 2.31 U | 0.387 U | 0.502 U | 0.016 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.017 U | 0.013 U | 2.55 U | 2.31 U | 0.387 U | 0.502 U | 0.016 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Bromoform | 75-25-2 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00087 U | 0.00065 U | 0.255 U | 0.231 U | 0.039 U | 0.05 U | 0.00082 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00174 U | 0.0013 U | 0.255 U | 0.231 U | 0.077 U | 0.1 U | 0.00164 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.00348 U | 0.0013 U | 0.255 U | 0.231 U | 0.077 U | 0.1 U | **0.00273 J** |
| Carbon disulfide | 75-15-0 | NE | 2.7 | **0.000635 J** | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00174 U | 0.0013 U | 0.255 U | 0.231 U | 0.077 U | 0.1 U | 0.00164 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00087 U | 0.00065 U | 0.255 U | 0.231 U | 0.019 U | 0.025 U | 0.00082 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00087 U | 0.00065 U | 1.28 U | 1.15 U | 0.039 U | 0.05 U | 0.00082 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | **0.00311** | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | **0.00141** |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00174 U | 0.0013 U | 0.255 U | 0.231 U | 0.077 U | 0.1 U | 0.00164 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00174 U | 0.0013 U | 0.255 U | 0.231 U | 0.077 U | 0.1 U | 0.00164 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.00497 C** | 0.0013 U | 0.255 U | 0.231 U | 0.039 U | 0.05 U | **0.00284 C** |
| Styrene | 100-42-5 | NE | NE | 0.00087 U | 0.00065 U | **0.453 D** | **0.266 D** | **0.036 J** | **0.028 J** | 0.00082 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00087 U | 0.00065 U | 0.255 U | 0.231 U | 0.039 U | 0.05 U | 0.00082 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.000438 J** | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | **0.00262** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | **0.000401 J** |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.019 U | 0.025 U | 0.00082 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00087 U | 0.00065 U | 0.128 U | 0.115 U | 0.039 U | 0.05 U | 0.00082 U |
| Total VOCs | TVOC | NE | NE | **0.021483** | ND | **6.608** | **3.339** | **0.642** | **0.492** | **0.032384** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.036 U | **0.449 D** | **12.9 D** | **9.87 D** | **1.85 D** | **0.953 D** | 0.035 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.036 U | **4.6 D** | **55.6 D** | **40.4 D** | **2.8 D** | **1.51 D** | 0.035 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.036 U | **2.51 D** | **54.6 D** | **38.7 D** | **2.89 D** | **1.71 D** | 0.035 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.036 U | **9.41 D** | **77 D** | **64.3 D** | **3.47 D** | **2.76 D** | 0.035 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.036 U | **6.88 D** | **99.8 D** | **86.9 D** | **7.03 D** | **4.29 D** | 0.035 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.036 U | **1.21 D** | **51.8 D** | **36.9 D** | **3.69 D** | **2.03 D** | 0.035 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.036 U | **1.01 D** | **68.4 D** | **44.6 D** | **2.48 D** | **1.44 D** | 0.035 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.036 U | **1.68 D** | **68.5 D** | **33.8 D** | **2.14 D** | **1.35 D** | 0.035 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.036 U | **4.91 D** | **201 D** | **140 D** | **13.3 D** | **7.94 D** | 0.035 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.036 U | **12.6 D** | **176 D** | **145 D** | **14.2 D** | **8.61 D** | 0.035 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.036 U | **6.33 D** | **74.2 D** | **61.3 D** | **5.78 D** | **2.91 D** | 0.035 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.036 U | **9.08 D** | **111 D** | **89.6 D** | **6.26 D** | **3.54 D** | 0.035 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.036 U | **5.03 D** | **53.9 D** | **38.2 D** | **3.31 D** | **1.78 D** | 0.035 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.036 U | **5.97 D** | **41.8 D** | **52.1 D** | **3.35 D** | **2.15 D** | 0.035 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.036 U | **7.6 D** | **78.1 D** | **68.3 D** | **6.87 D** | **3.42 D** | 0.035 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.036 U | **2.62 D** | **25.9 D** | **24.9 D** | **1.33 DJ** | **0.733 D** | 0.035 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.036 U | **6.16 D** | **56.1 D** | **45.5 D** | **2.73 D** | **1.82 D** | 0.035 U |
| Total PAHs | TPAH | NE | NE | ND | **88.049** | **1306.6** | **1020.37** | **83.48** | **48.946** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB527 | GPEC-SB528 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 |
| | | | Sample Name | GPEC-SB527 (75.4-76.4) | GPEC-SB528 | GPEC-SB529 | GPEC-SB-XX-030819 | GPEC-SB-XX-040319 | GPEC-SB529 (11-12) | GPEC-SB529 (79-80) |
| | | | Start Depth | 75.4 | 0.5 | 0.5 | 0.5 | 11 | 11 | 79 |
| | | | End Depth | 76.4 | 1.5 | 1.5 | 1.5 | 12 | 12 | 80 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/3/2019 | 3/15/2019 | 3/8/2019 | 3/8/2019 | 4/3/2019 | 4/3/2019 | 4/3/2019 |
| | | | Parent Sample Code | | | | GPEC-SB529 | GPEC-SB529 (11-12) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.362 U | 0.355 U | 0.375 U | 0.386 U | 17.8 U | 1.68 U | 0.348 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Carbazole | 86-74-8 | NE | NE | 0.036 U | 0.355 U | **1.13 D** | **0.538 D** | 1.78 U | 0.168 U | 0.035 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.036 U | 0.355 U | **4.84 D** | **3.05 D** | 1.78 U | **0.179 D** | 0.035 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Pyridine | 110-86-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.036 U | 0.355 U | 0.375 U | 0.386 U | 1.78 U | 0.168 U | 0.035 U |
| Total SVOCs | TSVOC | NE | NE | ND | **88.049** | **1312.57** | **1023.958** | **83.48** | **49.125** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB527 | GPEC-SB528 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 | GPEC-SB529 |
| | | | Sample Name | GPEC-SB527 (75.4-76.4) | GPEC-SB528 | GPEC-SB529 | GPEC-SB-XX-030819 | GPEC-SB-XX-040319 | GPEC-SB529 (11-12) | GPEC-SB529 (79-80) |
| | | | Start Depth | 75.4 | 0.5 | 0.5 | 0.5 | 11 | 11 | 79 |
| | | | End Depth | 76.4 | 1.5 | 1.5 | 1.5 | 12 | 12 | 80 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/3/2019 | 3/15/2019 | 3/8/2019 | 3/8/2019 | 4/3/2019 | 4/3/2019 | 4/3/2019 |
| | | | Parent Sample Code | | | | GPEC-SB529 | GPEC-SB529 (11-12) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.00354 U | 0.036 U | 0.037 U | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.00354 U | 0.036 U | 0.037 U | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.00354 U | 0.036 U | 0.037 U | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | **0.043** | 0.036 U | 0.037 U | **0.314** | **0.216** | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.00354 U | **2.32 D** | **2.28 D** | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | **0.022** | 0.036 U | 0.037 U | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.00354 U | 0.036 U | 0.037 U | 0.02 U | 0.02 U | 0.021 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.065** | **2.32** | **2.28** | **0.314** | **0.216** | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.043 U | 0.046 U | 0.046 U | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00345 U | 0.00364 U | 0.00369 U | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.043 U | 0.046 U | 0.046 U | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | **0.00995 J** | 0.019 U | 0.019 U | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.018 U | 0.019 U | 0.019 U | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.018 U | 0.019 U | 0.019 U | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2940** | **6470** | **7460** | **7860** | **4710** | **4010** | **4560** |
| Antimony | 7440-36-0 | NE | NE | 0.573 U | 0.55 U | **0.248 J** | 0.602 U | 0.555 U | 0.564 U | 0.571 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.554 J** | **10.9** | **7.32** | **7.33** | **1.97** | **1.82** | **0.672** |
| Barium | 7440-39-3 | 10000 | 820 | **14.2** | **104** | **137** | **118** | **47.1** | **34.8** | **34.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.573 U | **0.42 J** | **0.504 J** | **0.502 J** | **0.22 J** | **0.265 J** | **0.31 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.573 U | **0.762** | **0.797** | **0.732** | 0.555 U | 0.564 U | 0.571 U |
| Calcium | 7440-70-2 | NE | NE | **8330** | **6060** | **24100** | **13900** | **2990** | **2450** | **8760** |
| Chromium | 7440-47-3 | NE | NE | **8.65** | **17.9** | **19.3** | **19.2** | **12.2** | **9.99** | **11.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.11 U | 1.1 U | 1.14 U | 1.16 U | 1.07 U | 1.06 U | 1.1 U |
| Cobalt | 7440-48-4 | NE | NE | **2.99** | **6.23** | **5.46** | **6** | **4.95** | **4.62** | **3.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **9.52** | **225** | **353** | **583** | **53.8** | **41.1** | **8.7** |
| Iron | 7439-89-6 | NE | NE | **10500** | **16600** | **16300** | **17300** | **9680** | **9070** | **9590** |
| Lead | 7439-92-1 | 3900 | 450 | **4.32** | **201** | **150** | **170** | **28.3** | **21** | **2.31** |
| Magnesium | 7439-95-4 | NE | NE | **4620** | **4550** | **11200** | **6220** | **2660** | **2400** | **4540** |
| Manganese | 7439-96-5 | 10000 | 2000 | **166** | **294** | **263** | **273** | **266** | **279** | **202** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.0262 U | **1.12** | **0.495** | **0.502** | **0.0641** | **0.0583** | 0.0241 U |
| Nickel | 7440-02-0 | 10000 | 130 | **6.86** | **30.4** | **27.9** | **26.3** | **11.2** | **10** | **7.84** |
| Potassium | 7440-09-7 | NE | NE | **542** | **898** | **800** | **850** | **1010** | **831** | **1310** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.01 U | **4.32** | **3.56 J** | **4.01 J** | 3.88 U | 3.95 U | 3.99 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.573 U | **0.345 J** | **0.384 J** | **0.395 J** | 0.555 U | 0.564 U | 0.571 U |
| Sodium | 7440-23-5 | NE | NE | **174** | **104** | **107** | **117** | **129** | **119** | **356** |
| Thallium | 7440-28-0 | NE | NE | 0.573 U | 0.55 U | 0.617 U | 0.602 U | 0.555 U | 0.564 U | 0.571 U |
| Vanadium | 7440-62-2 | NE | NE | **9.8** | **50.3** | **34** | **32.7** | **15.1** | **14.2** | **12.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **18.2** | **212** | **310** | **293** | **71.7** | **55.7** | **17.3** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.8 U | 2.9 U | 2.9 U | 2.7 U | 2.7 U | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **5660** | **107000** | **85700** | **99000** | **28300** | **17000** | **1740** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB530 | GPEC-SB530 | GPEC-SB530 | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Sample Name | GPEC-SB530 | GPEC-SB530 (20-22) | GPEC-SB530 (91-92) | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Start Depth | 0.5 | 20 | 91 | 4 | 44 | 79 |
| | | | End Depth | 1.5 | 22 | 92 | 5 | 45 | 80 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/15/2019 | 4/19/2019 | 4/19/2019 | 3/7/2019 | 4/23/2019 | 4/23/2019 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | **0.02 DJ** | 0.00107 U | 0.00109 U | 0.00135 U | **0.035 J** | 0.00099 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.026 DJ** | **0.000383 J** | **0.000414 J** | 0.00135 U | 0.058 U | **0.0005 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | **0.528** | 0.00099 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.133 U | 0.00214 U | 0.00218 U | 0.0027 U | **0.221** | 0.00198 U |
| o-Xylene | 95-47-6 | NE | NE | 0.067 U | NA | NA | 0.00135 U | **0.153** | 0.00099 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.133 U | 0.00214 U | 0.00218 U | 0.0027 U | **0.374** | 0.00198 U |
| Total BTEX | TBTEX | NE | NE | **0.046** | **0.000383** | **0.000414** | ND | **0.937** | **0.0005** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.267 U | **0.029** | **0.019** | **0.014** | 0.233 U | **0.014** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 1.33 U | 0.021 U | 0.022 U | 0.027 U | 1.16 R | 0.02 R |
| Acrylonitrile | 107-13-1 | NE | NE | 1.33 U | 0.021 U | 0.022 U | 0.027 U | 1.16 U | 0.02 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Bromoform | 75-25-2 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Bromomethane | 74-83-9 | NE | NE | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.267 U | 0.00214 U | 0.00218 U | 0.0027 U | 0.233 U | 0.00198 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.267 U | 0.00428 U | 0.00436 U | 0.0027 U | 0.233 U | 0.00396 R |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.067 U | 0.00107 U | **0.00313** | 0.00135 U | 0.058 U | 0.00099 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.267 U | 0.00428 U | 0.00436 U | 0.0027 U | 0.233 U | 0.00396 R |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Chloromethane | 74-87-3 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.067 U | 0.00107 U | **0.00118** | 0.00135 U | 0.058 U | 0.00099 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.267 U | 0.00214 U | 0.00218 U | 0.0027 U | 0.233 U | 0.00198 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.267 U | 0.00214 U | 0.00218 U | 0.0027 U | 0.233 U | 0.00198 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.133 U | 0.00214 U | 0.00218 U | **0.00418 C** | 0.116 U | 0.00198 U |
| Styrene | 100-42-5 | NE | NE | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.067 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.058 U | 0.00099 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.133 U | 0.00107 U | 0.00109 U | 0.00135 U | 0.116 U | 0.00099 U |
| Total VOCs | TVOC | NE | NE | **0.046** | **0.029383** | **0.023724** | **0.01818** | **0.937** | **0.0145** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.296 DJ** | 0.038 U | 0.039 U | 0.038 U | **1.73** | 0.037 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **2.57 D** | 0.038 U | 0.039 U | **0.248** | **0.232** | 0.037 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **1.1 D** | 0.038 U | 0.039 U | **0.065** | **0.938** | 0.037 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **6.21 D** | 0.038 U | 0.039 U | **0.995** | **0.495** | 0.037 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **3.38 D** | 0.038 U | 0.039 U | **0.402** | **1** | 0.037 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.348 U | 0.038 U | 0.039 U | **0.027 J** | **1.44** | 0.037 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.342 DJ** | 0.038 U | 0.039 U | **0.05** | **3.03** | 0.037 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.491 D** | 0.038 U | 0.039 U | 0.038 U | **5.94** | 0.037 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **1.77 D** | 0.038 U | 0.039 U | **0.042** | **3.41** | 0.037 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **9.45 D** | 0.038 U | 0.039 U | **1.16** | **1.75** | 0.037 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **3.62 D** | 0.038 U | 0.039 U | **0.842** | **0.78** | 0.037 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **6.53 D** | 0.038 U | 0.039 U | **1.39** | **0.667** | 0.037 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **3.82 D** | 0.038 U | 0.039 U | **0.662** | **0.38** | 0.037 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **3.56 D** | 0.038 U | 0.039 U | **0.847** | **0.396** | 0.037 U |
| Chrysene | 218-01-9 | 110 | 1 | **4.76 D** | 0.038 U | 0.039 U | **0.997** | **0.867** | 0.037 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.38 D** | 0.038 U | 0.039 U | **0.335** | **0.162 J** | 0.037 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **4.04 D** | 0.038 U | 0.039 U | **0.747** | **0.339** | 0.037 U |
| Total PAHs | TPAH | NE | NE | **53.319** | ND | ND | **8.809** | **23.556** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB530 | GPEC-SB530 | GPEC-SB530 | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Sample Name | GPEC-SB530 | GPEC-SB530 (20-22) | GPEC-SB530 (91-92) | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Start Depth | 0.5 | 20 | 91 | 4 | 44 | 79 |
| | | | End Depth | 1.5 | 22 | 92 | 5 | 45 | 80 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/15/2019 | 4/19/2019 | 4/19/2019 | 3/7/2019 | 4/23/2019 | 4/23/2019 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.348 U | 0.384 U | 0.388 U | 0.038 U | 1.8 U | 0.367 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.348 U | **0.038 J** | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | **0.132 J** | 0.037 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.348 U | 0.384 U | 0.388 U | 0.038 U | 1.8 U | 0.367 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.348 U | 0.384 U | 0.388 U | 0.038 U | 1.8 U | 0.367 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 R | 0.037 R |
| Hexachloroethane | 67-72-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.348 U | 0.038 U | 0.039 U | 0.038 U | 0.18 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | **53.319** | **0.038** | ND | **8.809** | **23.688** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB530 | GPEC-SB530 | GPEC-SB530 | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Sample Name | GPEC-SB530 | GPEC-SB530 (20-22) | GPEC-SB530 (91-92) | GPEC-SB531 | GPEC-SB531 | GPEC-SB531 |
| | | | Start Depth | 0.5 | 20 | 91 | 4 | 44 | 79 |
| | | | End Depth | 1.5 | 22 | 92 | 5 | 45 | 80 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/15/2019 | 4/19/2019 | 4/19/2019 | 3/7/2019 | 4/23/2019 | 4/23/2019 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.034 U | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.034 U | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.034 U | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.034 U | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | **0.345 D** | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.034 U | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.064 D** | 0.024 U | 0.023 U | 0.036 U | 0.022 U | 0.023 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.409** | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.043 U | NA | NA | 0.018 U | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | 0.00344 U | NA | NA | 0.00144 U | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | 0.043 U | NA | NA | 0.018 U | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.018 U | NA | NA | 0.018 U | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.018 U | NA | NA | 0.018 U | NA | NA |
| Silvex | 93-72-1 | 1000 | | 0.018 U | NA | NA | 0.018 U | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8030** | **2060** | **5080** | **14800** | **2940** | **2970** |
| Antimony | 7440-36-0 | NE | NE | 0.568 U | 0.672 U | 0.605 U | 0.57 U | 0.625 U | 0.612 U |
| Arsenic | 7440-38-2 | 16 | 16 | **5.08** | **0.427 J** | **0.554 J** | **2.95** | **0.835** | **0.64** |
| Barium | 7440-39-3 | 10000 | 820 | **71.1** | **13.3** | **50.4** | **67.9** | **25.8** | **26.3** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.424 J** | 0.672 U | **0.292 J** | **0.571** | **0.225 J** | **0.189 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.622** | 0.672 U | 0.605 U | 0.57 U | 0.625 U | 0.612 U |
| Calcium | 7440-70-2 | NE | NE | **6820** | **795** | **6620** | **774** | **884** | **4040** |
| Chromium | 7440-47-3 | NE | NE | **19.6** | **4.84** | **16.7** | **28.3** | **9.71** | **6.92** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.05 U | 1 U | 1 U | 1.14 U | 1.14 U | 1.14 U |
| Cobalt | 7440-48-4 | NE | NE | **7.45** | **2.31** | **5.83** | **10.7** | **3.32** | **3.35** |
| Copper | 7440-50-8 | 10000 | 1720 | **220** | **6.09** | **9.29** | **18.7** | **9.48** | **8.01** |
| Iron | 7439-89-6 | NE | NE | **20000** | **6450** | **12500** | **18900** | **10800** | **7990** |
| Lead | 7439-92-1 | 3900 | 450 | **102** | **1.37** | **2.71** | **8.82** | **2.24** | **1.85** |
| Magnesium | 7439-95-4 | NE | NE | **5150** | **1080** | **5060** | **3700** | **1550** | **3030** |
| Manganese | 7439-96-5 | 10000 | 2000 | **320** | **110** | **160** | **317** | **188** | **166** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.136** | 0.0318 U | 0.0332 U | 0.0285 U | 0.0291 U | 0.0285 U |
| Nickel | 7440-02-0 | 10000 | 130 | **22.4** | **4.99** | **12.8** | **16.4** | **7.57** | **7.06** |
| Potassium | 7440-09-7 | NE | NE | **1200** | **347** | **2190** | **1020** | **577** | **672** |
| Selenium | 7782-49-2 | 6800 | 4 | **4** | 4.7 U | 4.24 U | **6.28** | 4.38 U | 4.28 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.568 U | 0.672 U | 0.605 U | 0.57 U | 0.625 U | 0.612 U |
| Sodium | 7440-23-5 | NE | NE | **97.7** | **90.5** | **480** | **68.9** | **87.2** | **207** |
| Thallium | 7440-28-0 | NE | NE | 0.568 U | 0.672 U | 0.605 U | 0.57 U | 0.625 U | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | **42.2** | **6.75** | **22** | **33.8** | **11.2** | **9.61** |
| Zinc | 7440-66-6 | 10000 | 2480 | **162** | **8.72** | **34.6** | **68.4** | **16.1** | **14** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.6 U | 3.1 U | 3 U | 2.8 U | 2.9 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **74900** | 1000 U | **2730** | **5670** | 1000 U | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 | GPEC-SB533 | GPEC-SB534 |
| | | | Sample Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 (19-20) | GPEC-SB533 (71.1-72.1) | GPEC-SB534 |
| | | | Start Depth | 3 | 16 | 85 | 5 | 19 | 71.1 | 5 |
| | | | End Depth | 4 | 17 | 86 | 5 | 20 | 72.1 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/6/2019 | 4/22/2019 | 4/22/2019 | 3/20/2019 | 4/4/2019 | 4/4/2019 | 3/18/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00116 U | **0.000533 J** | 0.00105 U | **0.00173** | 0.00101 U | 0.0012 U | 0.00104 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00116 U | **0.000811 J** | **0.00046 J** | **0.000943 J** | 0.00101 U | 0.0012 U | 0.00104 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00232 U | 0.00206 U | 0.0021 U | 0.00266 U | 0.00202 U | 0.0024 U | 0.00208 U |
| o-Xylene | 95-47-6 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00232 U | 0.00206 U | 0.0021 U | 0.00266 U | 0.00202 U | 0.0024 U | 0.00208 U |
| Total BTEX | TBTEX | NE | NE | ND | **0.001344** | **0.00046** | **0.002673** | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.012 U | **0.023** | **0.022** | **0.071** | **0.024** | **0.027** | **0.012** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.023 U | 0.021 R | 0.021 R | 0.027 U | 0.02 U | 0.024 U | 0.021 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.023 U | 0.021 U | 0.021 U | 0.027 U | 0.02 U | 0.024 U | 0.021 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Bromoform | 75-25-2 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00232 U | 0.00206 U | 0.0021 U | **0.013** | 0.00202 U | 0.0024 U | 0.00208 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.00232 U | 0.00412 R | 0.0042 R | **0.00414 J** | 0.00404 U | 0.0048 U | 0.00208 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00116 U | **0.00255** | 0.00105 U | **0.00587** | 0.00101 U | 0.0012 U | 0.00104 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00232 U | 0.00412 R | 0.0042 R | 0.00266 U | 0.00202 U | 0.0024 U | 0.00208 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | **0.0016** | 0.00104 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00116 U | 0.00103 U | **0.011** | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00232 U | 0.00206 U | 0.0021 U | 0.00266 U | 0.00202 U | 0.0024 U | 0.00208 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00232 U | 0.00206 U | 0.0021 U | 0.00266 U | 0.00202 U | 0.0024 U | 0.00208 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.00232 U | 0.00206 U | 0.0021 U | **0.00424 C** | **0.00473 C** | **0.00331 C** | **0.00243 C** |
| Styrene | 100-42-5 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00116 U | 0.00103 U | **0.014** | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00116 U | 0.00103 U | **0.00138** | 0.00133 U | 0.00101 U | **0.000368 J** | 0.00104 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00116 U | 0.00103 U | 0.00105 U | 0.00133 U | 0.00101 U | 0.0012 U | 0.00104 U |
| Total VOCs | TVOC | NE | NE | ND | **0.026894** | **0.04884** | **0.100923** | **0.02873** | **0.032278** | **0.01443** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | **0.102** | 0.033 U | 0.04 U | **0.288** | 0.036 U | 0.039 U | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.563** | 0.033 U | 0.04 U | **0.057** | 0.036 U | 0.039 U | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.6** | 0.033 U | 0.04 U | **0.544** | 0.036 U | 0.039 U | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **2.89** | 0.033 U | 0.04 U | **1.51** | 0.036 U | 0.039 U | 0.036 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **3.65** | 0.033 U | 0.04 U | **3.05** | 0.036 U | 0.039 U | 0.036 U |
| Fluorene | 86-73-7 | 1000 | 386 | **0.263** | 0.033 U | 0.04 U | **0.261** | 0.036 U | 0.039 U | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | **0.215** | 0.033 U | 0.04 U | **0.063** | 0.036 U | 0.039 U | 0.036 U |
| Naphthalene | 91-20-3 | 1000 | 12 | **0.474** | 0.033 U | 0.04 U | **0.143** | 0.036 U | 0.039 U | 0.036 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **2.64** | 0.033 U | 0.04 U | **2.74** | 0.036 U | 0.039 U | 0.036 U |
| Pyrene | 129-00-0 | 1000 | 1000 | **4.23** | 0.033 U | 0.04 U | **3.14** | 0.036 U | 0.039 U | 0.036 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **2.65** | 0.033 U | 0.04 U | **1.58** | 0.036 U | 0.039 U | 0.036 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **3.12** | 0.033 U | 0.04 U | **1.83** | 0.036 U | 0.039 U | 0.036 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **3.15** | 0.033 U | 0.04 U | **1.59** | 0.036 U | 0.039 U | 0.036 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **2.05** | 0.033 U | 0.04 U | **1.4** | 0.036 U | 0.039 U | 0.036 U |
| Chrysene | 218-01-9 | 110 | 1 | **2.96** | 0.033 U | 0.04 U | **1.68** | 0.036 U | 0.039 U | 0.036 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | **1.04** | 0.033 U | 0.04 U | **0.623** | 0.036 U | 0.039 U | 0.036 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **2.34** | 0.033 U | 0.04 U | **1.29** | 0.036 U | 0.039 U | 0.036 U |
| Total PAHs | TPAH | NE | NE | **32.937** | ND | ND | **21.789** | ND | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 | GPEC-SB533 | GPEC-SB534 |
| | | | Sample Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 (19-20) | GPEC-SB533 (71.1-72.1) | GPEC-SB534 |
| | | | Start Depth | 3 | 16 | 85 | 5 | 19 | 71.1 | 5 |
| | | | End Depth | 4 | 17 | 86 | 5 | 20 | 72.1 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/6/2019 | 4/22/2019 | 4/22/2019 | 3/20/2019 | 4/4/2019 | 4/4/2019 | 3/18/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.036 U | 0.335 U | 0.399 U | 0.374 U | 0.357 U | 0.393 U | 0.036 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.04** | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Carbazole | 86-74-8 | NE | NE | **0.178** | 0.033 U | 0.04 U | **0.24** | 0.036 U | 0.039 U | 0.036 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | **0.099** | 0.033 U | 0.04 U | **0.167** | 0.036 U | 0.039 U | 0.036 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.036 U | 0.335 U | 0.399 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.036 U | 0.335 U | 0.399 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.036 U | 0.033 R | 0.04 R | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Pyridine | 110-86-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.036 U | 0.033 U | 0.04 U | 0.037 U | 0.036 U | 0.039 U | 0.036 U |
| Total SVOCs | TSVOC | NE | NE | **33.254** | ND | ND | **22.196** | ND | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 | GPEC-SB533 | GPEC-SB534 |
| | | | Sample Name | GPEC-SB532 | GPEC-SB532 | GPEC-SB532 | GPEC-SB533 | GPEC-SB533 (19-20) | GPEC-SB533 (71.1-72.1) | GPEC-SB534 |
| | | | Start Depth | 3 | 16 | 86 | 5 | 19 | 71.1 | 5 |
| | | | End Depth | 4 | 17 | 86 | 5 | 20 | 72.1 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 3/6/2019 | 4/22/2019 | 4/22/2019 | 3/20/2019 | 4/4/2019 | 4/4/2019 | 3/18/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.018 U | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | **0.019 D** | 0.019 U | 0.023 U | 0.00379 U | 0.021 U | 0.022 U | 0.00346 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | **0.019** | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | 0.045 U | NA | NA | 0.00948 U | NA | NA | 0.00865 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endosulfan I | 959-98-8 | 920 | 102 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endrin | 72-20-8 | 410 | 0.06 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Endrin ketone | 53494-70-5 | NE | NE | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Methoxychlor | 72-43-5 | NE | 900 | 0.0036 U | NA | NA | 0.000758 U | NA | NA | 0.000692 U |
| Toxaphene | 8001-35-2 | NE | NE | 0.045 U | NA | NA | 0.00948 U | NA | NA | 0.00865 U |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | 0.018 U | NA | NA | 0.019 U | NA | NA | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | 0.018 U | NA | NA | 0.019 U | NA | NA | 0.018 U |
| Silvex | 93-72-1 | 1000 | | 0.018 U | NA | NA | 0.019 U | NA | NA | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5660** | **4150** | **4050** | **9730** | **3820** | **3170** | **9370** |
| Antimony | 7440-36-0 | NE | NE | **0.41 J** | 0.52 U | 0.625 U | **1.1** | 0.55 U | 0.625 U | 0.568 U |
| Arsenic | 7440-38-2 | 16 | 16 | **9.01** | **1.41** | **0.77** | **13.5** | **1.06** | **0.935** | **1.48** |
| Barium | 7440-39-3 | 10000 | 820 | **110** | **37.3** | **37.5** | **167** | **22.9** | **10.5** | **65.1** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.459 J** | **0.167 J** | **0.255 J** | **0.443 J** | **0.23 J** | **0.208 J** | **0.36 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | **1.03** | 0.52 U | 0.625 U | **0.843** | 0.55 U | 0.625 U | 0.568 U |
| Calcium | 7440-70-2 | NE | NE | **3690** | **21200** | **1570** | **11700** | **947** | **1170** | **1380** |
| Chromium | 7440-47-3 | NE | NE | **21.7** | **55.4** | **11.5** | **26.6** | **11** | **8.07** | **17.4** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.11 U | 1.02 U | 1.2 U | 1.15 U | 1.1 U | 1.2 U | 1.09 U |
| Cobalt | 7440-48-4 | NE | NE | **6.47** | **4.82** | **5.02** | **6.79** | **4.32** | **3.33** | **5.41** |
| Copper | 7440-50-8 | 10000 | 1720 | **169** | **33.1** | **9.75** | **337** | **18.4** | **6.48** | **29.2** |
| Iron | 7439-89-6 | NE | NE | **27700** | **14800** | **11000** | **17800** | **9980** | **11600** | **13600** |
| Lead | 7439-92-1 | 3900 | 450 | **190** | **61.2** | **3.36** | **283** | **2.9** | **1.89** | **4.34** |
| Magnesium | 7439-95-4 | NE | NE | **2710** | **12200** | **2200** | **2650** | **1560** | **1140** | **2500** |
| Manganese | 7439-96-5 | 10000 | 2000 | **408** | **244** | **262** | **292** | **260** | **78** | **289** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.62** | 0.0266 U | 0.0306 U | **2.25** | 0.0275 U | 0.0273 U | **0.0187 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **25.4** | **12.3** | **9.78** | **25.7** | **11.5** | **6.08** | **11.6** |
| Potassium | 7440-09-7 | NE | NE | **992** | **958** | **1090** | **804** | **761** | **411** | **1520** |
| Selenium | 7782-49-2 | 6800 | 4 | **5.14** | 3.64 U | 4.38 U | 4.16 U | 3.85 U | 4.38 U | **4.37** |
| Silver | 7440-22-4 | 6800 | 8.3 | **0.439 J** | 0.52 U | 0.625 U | **0.668** | 0.55 U | 0.625 U | 0.568 U |
| Sodium | 7440-23-5 | NE | NE | **233** | **301** | **208** | **63.2** | **86.1** | **196** | 56.8 U |
| Thallium | 7440-28-0 | NE | NE | 0.585 U | 0.52 U | 0.625 U | 0.594 U | 0.55 U | 0.625 U | 0.568 U |
| Vanadium | 7440-62-2 | NE | NE | **26** | **16.7** | **14.2** | **24.8** | **12** | **8.62** | **19.8** |
| Zinc | 7440-66-6 | 10000 | 2480 | **263** | **17.5** | **24.2** | **385** | **21.3** | **14.7** | **31.1** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.6 U | 3 U | 2.9 U | 2.7 U | 3 U | 2.7 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **55800** | 1000 U | 1000 U | **14100** | 1000 U | **1100** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB534 | GPEC-SB534 | GPEC-SB535 | GPEC-SB535 | GPEC-SB535 | GPEC-SB536 |
| | | | Sample Name | GPEC-SB534 (46.5-47.5) | GPEC-SB534 (79-80) | GPEC-SB535 | GPEC-SB535 (46-47) | GPEC-SB535 (81.8-82.8) | GPEC-SB536 |
| | | | Start Depth | 46.5 | 79 | 5 | 46 | 81.8 | 5 |
| | | | End Depth | 47.5 | 80 | 5 | 47 | 82.8 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/5/2019 | 4/5/2019 | 3/18/2019 | 4/16/2019 | 4/16/2019 | 3/19/2019 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.000478 J** | **0.000321 J** | 0.00112 U | **0.00058 J** | **0.000531 J** | 0.00117 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00224 U | 0.0023 U | 0.00224 U | 0.00184 U | 0.00194 U | 0.00234 U |
| o-Xylene | 95-47-6 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00224 U | 0.0023 U | 0.00224 U | 0.00184 U | 0.00194 U | 0.00234 U |
| Total BTEX | TBTEX | NE | NE | **0.000478** | **0.000321** | ND | **0.00058** | **0.000531** | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.029** | **0.029** | **0.025** | **0.034** | **0.025** | **0.0079 J** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.022 R | 0.023 R | 0.022 U | 0.018 U | 0.019 U | 0.023 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.022 U | 0.023 U | 0.022 U | 0.018 U | 0.019 U | 0.023 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Bromoform | 75-25-2 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00224 U | 0.0023 U | 0.00224 U | 0.00184 U | 0.00194 U | 0.00234 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | **0.00298 J** | 0.0046 R | **0.00468** | 0.00368 U | 0.00388 U | **0.00382** |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00224 R | 0.0023 R | 0.00224 U | 0.00368 U | 0.00388 U | 0.00234 U |
| Chloroform | 67-66-3 | 700 | 0.37 | **0.0014** | **0.00125** | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00224 U | 0.0023 U | 0.00224 U | 0.00184 U | 0.00194 U | 0.00234 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00224 U | 0.0023 U | 0.00224 U | 0.00184 U | 0.00194 U | 0.00234 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.00441 U | **0.00741** | **0.00336 C** | 0.00184 U | **0.00304 C** | **0.00304 C** |
| Styrene | 100-42-5 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00112 U | 0.00115 U | 0.00112 U | **0.0018** | **0.0057** | 0.00117 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | **0.000749 J** | 0.00117 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00112 U | 0.00115 U | 0.00112 U | 0.00092 U | 0.00097 U | 0.00117 U |
| Total VOCs | TVOC | NE | NE | **0.033858** | **0.037981** | **0.03304** | **0.03638** | **0.03502** | **0.01476** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.036 J** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.077** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.078** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.402** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.736** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.043** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | 0.038 U | 0.036 U | **0.044** | **0.045** | **0.031 J** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | 0.038 U | 0.036 U | **0.363** | **0.42** | **0.059** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.508** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.946** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.437** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.425** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.382** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.442** |
| Chrysene | 218-01-9 | 110 | 1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.487** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.154** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.351** |
| Total PAHs | TPAH | NE | NE | ND | ND | ND | **0.407** | **0.465** | **5.594** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB534 | GPEC-SB534 | GPEC-SB535 | GPEC-SB535 | GPEC-SB535 | GPEC-SB536 |
| | | | Sample Name | GPEC-SB534 (46.5-47.5) | GPEC-SB534 (79-80) | GPEC-SB535 | GPEC-SB535 (46-47) | GPEC-SB535 (81.8-82.8) | GPEC-SB536 |
| | | | Start Depth | 46.5 | 79 | 5 | 46 | 81.8 | 5 |
| | | | End Depth | 47.5 | 80 | 5 | 47 | 82.8 | 5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/5/2019 | 4/5/2019 | 3/18/2019 | 4/16/2019 | 4/16/2019 | 3/19/2019 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.382 U | 0.381 U | 0.036 U | 0.379 U | 0.361 U | 0.037 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.03 J** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | **0.023 J** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.379 U | 0.361 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.038 U | 0.036 U | 0.379 U | 0.361 U | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.038 U | 0.036 U | 0.038 U | 0.036 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | ND | ND | ND | **0.407** | **0.465** | **5.647** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | **Area** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| | | | **Investigation Phase** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** | **Phase 3** |
| | | | **Location Name** | **GPEC-SB534** | **GPEC-SB534** | **GPEC-SB535** | **GPEC-SB535** | **GPEC-SB535** | **GPEC-SB536** |
| | | | **Sample Name** | **GPEC-SB534 (46.5-47.5)** | **GPEC-SB534 (79-80)** | **GPEC-SB535** | **GPEC-SB535 (46-47)** | **GPEC-SB535 (81.8-82.8)** | **GPEC-SB536** |
| | | | **Start Depth** | **46.5** | **79** | **5** | **46** | **81.8** | **5** |
| | | | **End Depth** | **47.5** | **80** | **5** | **47** | **82.8** | **5** |
| | | | **Depth Unit** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| | | | **Sample Date** | **4/5/2019** | **4/5/2019** | **3/18/2019** | **4/16/2019** | **4/16/2019** | **3/19/2019** |
| | | | **Parent Sample Code** | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | 0.0036 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.023 U | 0.00362 U | 0.023 U | 0.022 U | **0.014** |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | **0.014** |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.00905 U | NA | NA | 0.009 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.000724 U | NA | NA | 0.00072 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.00905 U | NA | NA | 0.009 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.018 U | NA | NA | 0.018 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.018 U | NA | NA | 0.018 U |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.018 U | NA | NA | 0.018 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **2830** | **2870** | **9820** | **8910** | **2980** | **10100** |
| Antimony | 7440-36-0 | NE | NE | 0.622 U | 0.652 U | 0.588 U | 0.633 U | 0.591 U | 0.588 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.602 J** | **1.18** | **1.86** | **2.13** | **0.88** | **7.23** |
| Barium | 7440-39-3 | 10000 | 820 | **20.9** | **21.4** | **38.2** | **77.2** | **19.1** | **46.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.622 U | **0.203 J** | **0.372 J** | **0.573 J** | **0.193 J** | **0.362 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.622 U | 0.652 U | 0.588 U | 0.633 U | 0.591 U | 0.588 U |
| Calcium | 7440-70-2 | NE | NE | **9540** | **1540** | **495** | **1430** | **1060** | **1440** |
| Chromium | 7440-47-3 | NE | NE | **7.14** | **13.3** | **13** | **23.5** | **7.29** | **17.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.21 U | 1.21 U | 1.1 U | 1.2 U | 1.13 U | 1.11 U |
| Cobalt | 7440-48-4 | NE | NE | **2.43** | **2.54** | **4.74** | **9.1** | **2.97** | **6.34** |
| Copper | 7440-50-8 | 10000 | 1720 | **6.55** | **17.1** | **39.2** | **17.6** | **7.64** | **73.6** |
| Iron | 7439-89-6 | NE | NE | **7480** | **8930** | **12400** | **21100** | **8480** | **17000** |
| Lead | 7439-92-1 | 3900 | 450 | **1.63** | **2.96** | **5.16** | **6.74** | **2.27** | **50.9** |
| Magnesium | 7439-95-4 | NE | NE | **4730** | **1560** | **2270** | **3630** | **1380** | **2030** |
| Manganese | 7439-96-5 | 10000 | 2000 | **121** | **136** | **286** | **351** | **182** | **290** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.0275 U | 0.0275 U | **0.0112 J** | 0.0289 U | 0.0277 U | **0.159** |
| Nickel | 7440-02-0 | 10000 | 130 | **5.48** | **5.76** | **11.6** | **19.8** | **8.22** | **1910** |
| Potassium | 7440-09-7 | NE | NE | **587** | **504** | **946** | **1980** | **600** | **943** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.36 U | 4.56 U | **4.01 J** | 4.43 U | 4.14 U | **3.05 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.622 U | 0.652 U | 0.588 U | 0.633 U | 0.591 U | 0.588 U |
| Sodium | 7440-23-5 | NE | NE | **127** | **180** | 58.8 U | **165** | **151** | 58.8 U |
| Thallium | 7440-28-0 | NE | NE | 0.622 U | 0.652 U | 0.588 U | 0.633 U | 0.591 U | 0.588 U |
| Vanadium | 7440-62-2 | NE | NE | **9.19** | **10.7** | **18.5** | **31.3** | **8.77** | **28.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **12.2** | **12.7** | **21.8** | **47.1** | **15.8** | **224** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3 U | 2.7 U | 3 U | 2.8 U | 2.8 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **1010** | **1040** | 1000 U | **1520** | **18100** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB536 | GPEC-SB536 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB538/MW538 | GPEC-SB538/MW538 |
| | | | Sample Name | GPEC-SB536 (48-49) | GPEC-SB536 (94.8-95.8) | GPEC-SB537/MW537 | GPEC-SB537 (56-57) | GPEC-SB537 (108.5-109.5) | GPEC-SB538 | GPEC-SB538 (42-43) |
| | | | Start Depth | 48 | 94.8 | 0 | 56 | 108.5 | 5 | 42 |
| | | | End Depth | 49 | 95.8 | 1 | 57 | 109.5 | 5 | 43 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/15/2019 | 4/15/2019 | 3/15/2019 | 4/8/2019 | 4/8/2019 | 3/18/2019 | 4/8/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.000665 J** | **0.000944 J** | 0.00089 U | **0.000312 J** | 0.001 U | 0.00104 U | **0.000366 J** |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00198 U | 0.00222 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| o-Xylene | 95-47-6 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00198 U | 0.00222 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| Total BTEX | TBTEX | NE | NE | **0.000665** | **0.000944** | ND | **0.000312** | ND | ND | **0.000366** |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.038** | **0.061** | 0.0089 U | **0.016** | **0.018** | **0.022** | **0.014** |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.02 U | 0.022 U | 0.018 U | 0.021 U | 0.02 U | 0.021 U | 0.021 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.02 U | 0.022 U | 0.018 U | 0.021 U | 0.02 U | 0.021 U | 0.021 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Bromoform | 75-25-2 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00198 U | 0.00222 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.00396 U | **0.00636** | 0.00178 U | 0.00416 U | 0.004 U | 0.00208 U | 0.00428 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00099 U | 0.00111 U | 0.00089 U | **0.000641 J** | 0.001 U | 0.00104 U | 0.00107 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00396 U | 0.00444 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00198 U | 0.00222 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00198 U | 0.00222 U | 0.00178 U | 0.00208 U | 0.002 U | 0.00208 U | 0.00214 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.00198 U | **0.0054 C** | 0.00178 U | **0.00381 C** | **0.00265 C** | **0.00255 C** | **0.00279 C** |
| Styrene | 100-42-5 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.000391 J** | **0.01** | 0.00089 U | **0.00136** | **0.00947** | 0.00104 U | 0.00107 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00099 U | **0.000938 J** | 0.00089 U | 0.00104 U | **0.000598 J** | 0.00104 U | 0.00107 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00099 U | 0.00111 U | 0.00089 U | 0.00104 U | 0.001 U | 0.00104 U | 0.00107 U |
| Total VOCs | TVOC | NE | NE | **0.039056** | **0.084642** | ND | **0.022123** | **0.030718** | **0.02455** | **0.017156** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.04 U | 0.039 U | **0.081** | 0.035 U | 0.036 U | 0.036 U | 0.034 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.04 U | 0.039 U | **0.941** | **0.033 J** | 0.036 U | 0.036 U | 0.034 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.04 U | 0.039 U | **0.475** | **0.022 J** | 0.036 U | 0.036 U | 0.034 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.04 U | 0.039 U | **1.74** | **0.081** | 0.036 U | 0.036 U | 0.034 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.04 U | 0.039 U | **3.92** | **0.145** | 0.036 U | 0.036 U | 0.034 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.04 U | 0.039 U | **0.172** | 0.035 U | 0.036 U | 0.036 U | 0.034 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.04 U | **0.034 J** | **0.071** | 0.035 U | 0.036 U | 0.036 U | 0.034 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.04 U | **0.306** | **0.086** | 0.035 U | 0.036 U | 0.036 U | 0.034 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.04 U | 0.039 U | **1.15** | **0.058** | 0.036 U | 0.036 U | 0.034 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.04 U | 0.039 U | **4.8** | **0.214** | 0.036 U | 0.036 U | 0.034 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.04 U | 0.039 U | **2.56** | **0.115** | 0.036 U | 0.036 U | 0.034 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.04 U | 0.039 U | **2.55** | **0.123** | 0.036 U | 0.036 U | 0.034 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.04 U | 0.039 U | **1.95** | **0.088** | 0.036 U | 0.036 U | 0.034 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.04 U | 0.039 U | **1.8** | **0.084** | 0.036 U | 0.036 U | 0.034 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.04 U | 0.039 U | **2.68** | **0.123** | 0.036 U | 0.036 U | 0.034 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.04 U | 0.039 U | **0.903** | 0.035 U | 0.036 U | 0.036 U | 0.034 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.04 U | 0.039 U | **1.57** | **0.063** | 0.036 U | 0.036 U | 0.034 U |
| Total PAHs | TPAH | NE | NE | ND | **0.34** | **27.449** | **1.149** | ND | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | |
| | | | Location Name | GPEC-SB536 | GPEC-SB536 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB538/MW538 | GPEC-SB538/MW538 | |
| | | | Sample Name | GPEC-SB536 (48-49) | GPEC-SB536 (94.8-95.8) | GPEC-SB537/MW537 | GPEC-SB537 (56-57) | GPEC-SB537 (108.5-109.5) | GPEC-SB538 | GPEC-SB538 (42-43) | |
| | | | Start Depth | 48 | 94.8 | 0 | 56 | 108.5 | 5 | 42 | |
| | | | End Depth | 49 | 95.8 | 1 | 57 | 109.5 | 5 | 43 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 4/15/2019 | 4/15/2019 | 3/15/2019 | 4/8/2019 | 4/8/2019 | 3/18/2019 | 4/8/2019 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.397 U | 0.389 U | 0.038 U | 0.345 U | 0.356 U | 0.036 U | 0.343 U | |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.039 U | **0.038** | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | 0.039 U | **0.058** | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | 0.039 U | **0.029 J** | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.397 U | 0.389 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.397 U | 0.389 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Pyridine | 110-86-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.039 U | 0.038 U | 0.035 U | 0.036 U | 0.036 U | 0.034 U | |
| Total SVOCs | TSVOC | NE | NE | ND | **0.34** | **27.574** | **1.149** | ND | ND | ND | |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB536 | GPEC-SB536 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB537/MW537 | GPEC-SB538/MW538 | GPEC-SB538/MW538 |
| | | | Sample Name | GPEC-SB536 (48-49) | GPEC-SB536 (94.8-95.8) | GPEC-SB537/MW537 | GPEC-SB537 (56-57) | GPEC-SB537 (108.5-109.5) | GPEC-SB538 | GPEC-SB538 (42-43) |
| | | | Start Depth | 48 | 94.8 | 0 | 56 | 108.5 | 5 | 42 |
| | | | End Depth | 49 | 95.8 | 1 | 57 | 109.5 | 5 | 43 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/15/2019 | 4/15/2019 | 3/15/2019 | 4/8/2019 | 4/8/2019 | 3/18/2019 | 4/8/2019 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.023 U | 0.00378 U | 0.02 U | 0.021 U | 0.00345 U | 0.02 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.019 U | NA | NA | 0.00863 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00151 U | NA | NA | 0.00069 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.019 U | NA | NA | 0.00863 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.019 U | NA | NA | 0.018 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.019 U | NA | NA | 0.018 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.019 U | NA | NA | 0.018 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3660** | **3220** | **10200** | **5240** | **3150** | **8440** | **4360** |
| Antimony | 7440-36-0 | NE | NE | 0.595 U | 0.617 U | **0.936** | 0.569 U | 0.581 U | 0.56 U | 0.572 U |
| Arsenic | 7440-38-2 | 16 | 16 | **0.772** | **0.409 J** | **19.5** | **1.1** | **0.579 J** | **1.43** | **1.17** |
| Barium | 7440-39-3 | 10000 | 820 | **24.5** | **12.8** | **264** | **36.6** | **21.8** | **48.7** | **30.6** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.267 J** | **0.28 J** | **0.546 J** | **0.3 J** | **0.19 J** | **0.343 J** | **0.291 J** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.595 U | 0.617 U | **1.09** | 0.569 U | 0.581 U | 0.56 U | 0.572 U |
| Calcium | 7440-70-2 | NE | NE | **1600** | **1760** | **8310** | **2780** | **1250** | **738** | **3900** |
| Chromium | 7440-47-3 | NE | NE | **7.59** | **7.05** | **23.2** | **14.9** | **9.7** | **17** | **9.95** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.19 U | 1.2 U | 1.14 U | 1.06 U | 1.11 U | 1.08 U | 1.07 U |
| Cobalt | 7440-48-4 | NE | NE | **2.85** | **3.54** | **7.04** | **4.46** | **3.31** | **5.35** | **3.85** |
| Copper | 7440-50-8 | 10000 | 1720 | **6.42** | **7.64** | **306** | **13.2** | **10.8** | **26.4** | **9.31** |
| Iron | 7439-89-6 | NE | NE | **6750** | **8880** | **20000** | **9710** | **9530** | **12200** | **8990** |
| Lead | 7439-92-1 | 3900 | 450 | **2.53** | **3.62** | **365** | **7.15** | **2.54** | **6.17** | **3.51** |
| Magnesium | 7439-95-4 | NE | NE | **2250** | **2420** | **3310** | **2800** | **1750** | **2150** | **3150** |
| Manganese | 7439-96-5 | 10000 | 2000 | **135** | **69.3** | **456** | **243** | **229** | **293** | **243** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.0298 U | 0.0289 U | **0.67 D** | **0.0227 J** | 0.0267 U | 0.0241 U | 0.0227 U |
| Nickel | 7440-02-0 | 10000 | 130 | **12.4** | **7** | **21.7** | **14.6** | **6.94** | **11.4** | **11.3** |
| Potassium | 7440-09-7 | NE | NE | **828** | **586** | **971** | **1140** | **688** | **852** | **896** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.17 U | 4.32 U | **5.16** | 3.98 U | 4.06 U | **2.41 J** | 4 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.595 U | 0.617 U | **0.775** | 0.569 U | 0.581 U | 0.56 U | 0.572 U |
| Sodium | 7440-23-5 | NE | NE | **283** | **180** | **58.4 J** | **329** | **192** | **43.1 J** | **155** |
| Thallium | 7440-28-0 | NE | NE | 0.595 U | 0.617 U | 0.614 U | 0.569 U | 0.581 U | 0.56 U | 0.572 U |
| Vanadium | 7440-62-2 | NE | NE | **9.5** | **10.8** | **26.7** | **13.2** | **9.43** | **23.8** | **10.6** |
| Zinc | 7440-66-6 | 10000 | 2480 | **15.7** | **18** | **459** | **23.5** | **14.3** | **27.1** | **18.6** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 3 U | 2.8 U | 2.7 U | 2.8 U | 2.7 U | 2.7 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | 1000 U | **52900** | **3140** | **5130** | 1000 U | **1660** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 8** |
| **Investigation Phase** | | | | **Phase 3** | **Supplemental Inv.** | **Supplemental Inv.** | **Supplemental Inv.** | **Supplemental Inv.** | **Supplemental Inv.** |
| **Location Name** | | | | **GPEC-SB538/MW538** | **GPEC-SB704** | **GPEC-SB704** | **GPEC-SB705** | **GPEC-SB705** | **GPEC-SB705** |
| **Sample Name** | | | | **GPEC-SB538 (114-115)** | **GPEC-SB-704** | **GPEC-SB-704 (30-31)** | **GPEC-SB-705 (5)** | **DUP-01** | **GPEC-SB-705 (11-12)** |
| **Start Depth** | | | | **114** | **4** | **30** | **5** | **5** | **11** |
| **End Depth** | | | | **115** | **5** | **31** | **5** | **5** | **12** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/9/2019** | **10/11/2016** | **10/12/2016** | **10/13/2016** | **10/13/2016** | **10/13/2016** |
| **Parent Sample Code** | | | | | | | | **GPEC-SB-705 (5)** | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.000294 J** | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| m,p-Xylene | 108383/106423 | NE | NE | 0.00184 U | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | 0.00092 U | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.00184 U | 0.011 U | 0.012 U | 0.011 UJ | 0.011 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | **0.000294** | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.047** | 0.027 U | 0.031 U | 0.027 UJ | 0.027 U | 0.027 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.018 U | 0.109 U | 0.122 U | 0.106 R | 0.106 U | 0.11 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.018 U | 0.109 U | 0.122 U | 0.106 UJ | 0.106 U | 0.11 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Bromoform | 75-25-2 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00184 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | **0.00575** | 0.011 U | 0.012 U | 0.011 UJ | 0.011 U | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00184 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00184 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00184 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.00368 C** | 0.011 U | 0.012 U | 0.011 UJ | 0.011 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.027** | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | **0.000661 J** | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00092 U | 0.00545 U | 0.00611 U | 0.00532 UJ | 0.00531 U | 0.00548 U |
| Total VOCs | TVOC | NE | NE | **0.084385** | ND | ND | ND | ND | ND |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.037 U | **0.278 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.037 U | **0.214 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.037 U | **1.05 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.037 U | **2.07 D** | 0.039 U | 0.035 U | 0.034 U | **0.042** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.037 U | **4.43 D** | 0.039 U | 0.035 U | 0.034 U | **0.032 J** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.037 U | **0.379 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.037 U | **0.14 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.037 U | **0.185 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.037 U | **4.79 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.037 U | **4.6 D** | 0.039 U | **0.038 J** | **0.037** | **0.075** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.037 U | **2.67 D** | 0.039 U | 0.035 U | 0.034 U | **0.043** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.037 U | **2.87 D** | 0.039 U | 0.035 U | 0.034 U | **0.04** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.037 U | **2.19 D** | 0.039 U | 0.035 U | 0.034 U | **0.036** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.037 U | **2.39 D** | 0.039 U | 0.035 U | 0.034 U | **0.04** |
| Chrysene | 218-01-9 | 110 | 1 | 0.037 U | **2.55 D** | 0.039 U | 0.035 U | 0.034 U | **0.042** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.037 U | **0.648 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.037 U | **1.81 D** | 0.039 U | 0.035 U | 0.034 U | **0.037** |
| Total PAHs | TPAH | NE | NE | ND | **33.264** | ND | **0.038** | **0.037** | **0.387** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. |
| | | | Location Name | GPEC-SB538/MW538 | GPEC-SB704 | GPEC-SB704 | GPEC-SB705 | GPEC-SB705 | GPEC-SB705 |
| | | | Sample Name | GPEC-SB538 (114-115) | GPEC-SB-704 | GPEC-SB-704 (30-31) | GPEC-SB-705 (5) | DUP-01 | GPEC-SB-705 (11-12) |
| | | | Start Depth | 114 | 4 | 30 | 5 | 5 | 11 |
| | | | End Depth | 115 | 5 | 31 | 5 | 5 | 12 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/9/2019 | 10/11/2016 | 10/12/2016 | 10/13/2016 | 10/13/2016 | 10/13/2016 |
| | | | Parent Sample Code | | | | | GPEC-SB-705 (5) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.373 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.037 U | **0.08 D** | 0.039 U | 0.035 U | 0.034 U | **0.03 J** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| Carbazole | 86-74-8 | NE | NE | 0.037 U | **0.28 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.037 U | **0.233 D** | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 UJ | 0.034 U | 0.036 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Pyridine | 110-86-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.037 U | 0.07 U | 0.039 U | 0.035 U | 0.034 U | 0.036 U |
| Total SVOCs | TSVOC | NE | NE | ND | **33.857** | ND | **0.038** | **0.037** | **0.417** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Phase 3 | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. |
| | | | Location Name | GPEC-SB538/MW538 | GPEC-SB704 | GPEC-SB704 | GPEC-SB705 | GPEC-SB705 | GPEC-SB705 |
| | | | Sample Name | GPEC-SB538 (114-115) | GPEC-SB-704 | GPEC-SB-704 (30-31) | GPEC-SB-705 (5) | DUP-01 | GPEC-SB-705 (11-12) |
| | | | Start Depth | 114 | 4 | 30 | 5 | 5 | 11 |
| | | | End Depth | 115 | 5 | 31 | 5 | 5 | 12 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/9/2019 | 10/11/2016 | 10/12/2016 | 10/13/2016 | 10/13/2016 | 10/13/2016 |
| | | | Parent Sample Code | | | | | GPEC-SB-705 (5) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.021 U | 0.024 U | 0.021 U | 0.02 U | 0.021 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.052 U | NA | 0.051 U | 0.05 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00413 U | NA | 0.0041 U | 0.00401 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.052 U | NA | 0.051 U | 0.05 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.017 U | NA | 0.018 U | 0.017 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.017 U | NA | 0.018 U | 0.017 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.017 U | NA | 0.018 U | 0.017 U | NA |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3770** | **4950** | **2290** | **5190 J** | **4910** | **6290** |
| Antimony | 7440-36-0 | NE | NE | 0.579 U | **8.67** | 0.655 U | 0.545 U | 0.574 U | **0.429 J** |
| Arsenic | 7440-38-2 | 16 | 16 | **0.762** | **9.63** | **0.507 J** | **0.786** | **1.01** | **1.41** |
| Barium | 7440-39-3 | 10000 | 820 | **34.8** | **265** | **14** | **28.5** | **27.3** | **36.9** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.274 J** | 0.572 U | 0.655 U | 0.545 U | 0.574 U | 0.578 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.579 U | **0.715** | 0.655 U | 0.545 U | 0.574 U | 0.578 U |
| Calcium | 7440-70-2 | NE | NE | **1750** | **7340** | **3990** | **859 J** | **723** | **1240** |
| Chromium | 7440-47-3 | NE | NE | **13.4** | **21.7** | **4.93** | **9.95** | **9.9** | **13.5** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.12 U | 1.09 U | 1.22 U | 1.06 U | 1.06 U | 1.1 U |
| Cobalt | 7440-48-4 | NE | NE | **4.46** | **3.99** | **1.95** | **3.61** | **3.7** | **4.54** |
| Copper | 7440-50-8 | 10000 | 1720 | **11.3** | **215** | **6.37** | **9.61** | **9.7** | **25.6** |
| Iron | 7439-89-6 | NE | NE | **18900** | **16100** | **7000** | **10600 J** | **10500** | **12400** |
| Lead | 7439-92-1 | 3900 | 450 | **2.43** | **269** | **1.93** | **4.09** | **4.12** | **14.1** |
| Magnesium | 7439-95-4 | NE | NE | **1970** | **1970** | **2880** | **1520** | **1490** | **2170** |
| Manganese | 7439-96-5 | 10000 | 2000 | **319** | **273** | **200** | **239** | **227** | **282** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.0275 U | **1.44** | 0.029 U | 0.024 U | **0.019 J** | 0.023 U |
| Nickel | 7440-02-0 | 10000 | 130 | **8.89** | **20.1** | **4.45** | **7.41** | **7.26** | **12.3** |
| Potassium | 7440-09-7 | NE | NE | **740** | **657** | **351** | **716 J** | **694** | **1110** |
| Selenium | 7782-49-2 | 6800 | 4 | 4.05 U | **1.01** | 0.655 U | **1.82** | **1.36** | **0.651** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.579 U | **0.49 J** | 0.655 U | 0.545 U | 0.574 U | 0.578 U |
| Sodium | 7440-23-5 | NE | NE | **208** | **147** | **162** | **214** | **199** | **256** |
| Thallium | 7440-28-0 | NE | NE | 0.579 U | 0.572 U | 0.655 U | 0.545 U | 0.574 U | 0.578 U |
| Vanadium | 7440-62-2 | NE | NE | **15.8** | **20.3** | **9.1** | **17.2** | **17.1** | **19.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **17.6** | **368** | **10** | **18.5** | **18.3** | **46.6** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | 2.7 U | 3.1 U | 2.7 U | 2.7 U | 2.7 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **1900** | **12800** | **1860** | 1000 U | **1330** | **1230** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. |
| | | | Location Name | GPEC-SB705 | GPEC-SB709 | GPEC-SB709 | GPEC-SB709 | GPEC-SB801 | GPEC-SB801 | GPEC-SB801 |
| | | | Sample Name | GPEC-SB-705 (29-30) | GPEC-SB-709 (5) | GPEC-SB-709 (21-22) | GPEC-SB-709 (29-30) | GPEC-SB801 | GPEC-SBXX-042017 | GPEC-SB801 |
| | | | Start Depth | 29 | 5 | 21 | 29 | 5 | 5 | 28 |
| | | | End Depth | 30 | 5 | 22 | 30 | 5 | 5 | 29 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/13/2016 | 10/13/2016 | 10/13/2016 | 10/13/2016 | 4/20/2017 | 4/20/2017 | 4/21/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB801 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.011 UJ | 0.224 U | 0.011 U | 0.01 UJ | 0.01 U | 0.011 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 U | 0.028 UJ | 0.224 U | 0.028 U | 0.052 UJ | 0.052 U | 0.057 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.115 U | 0.11 R | 2.35 U | 0.112 U | 0.104 R | 0.104 U | 0.114 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.115 U | 0.11 UJ | 2.24 U | 0.112 U | 0.104 UJ | 0.104 U | 0.114 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Bromoform | 75-25-2 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 0.011 UJ | 0.448 U | 0.011 U | 0.01 UJ | 0.01 U | 0.011 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.011 UJ | 0.224 U | 0.011 U | 0.01 UJ | 0.01 U | 0.011 U |
| Styrene | 100-42-5 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | **0.00508 J** | **0.00395 DJ** | **0.00475 DJ** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.01 UJ | 0.01 U | 0.011 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00577 U | 0.0055 UJ | 0.112 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00577 U | 0.0055 UJ | 0.224 U | 0.0056 U | 0.00518 UJ | 0.00518 U | 0.00572 U |
| Total VOCs | TVOC | NE | NE | ND | ND | ND | ND | **0.00508** | **0.00395** | **0.00475** |
| **PAHs (mg/kg)** | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | **0.041** | 0.033 U | 0.037 U |
| Fluorene | 86-73-7 | 1000 | 386 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | **0.049** | 0.033 U | 0.037 U |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | **0.028 J** | 0.033 U | 0.037 U |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Chrysene | 218-01-9 | 110 | 1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Total PAHs | TPAH | NE | NE | ND | ND | ND | ND | **0.118** | ND | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. |
| | | | Location Name | GPEC-SB705 | GPEC-SB709 | GPEC-SB709 | GPEC-SB709 | GPEC-SB801 | GPEC-SB801 | GPEC-SB801 |
| | | | Sample Name | GPEC-SB-705 (29-30) | GPEC-SB-709 (5) | GPEC-SB-709 (21-22) | GPEC-SB-709 (29-30) | GPEC-SB801 | GPEC-SBXX-042017 | GPEC-SB801 |
| | | | Start Depth | 29 | 5 | 21 | 29 | 5 | 5 | 28 |
| | | | End Depth | 30 | 5 | 22 | 30 | 5 | 5 | 29 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/13/2016 | 10/13/2016 | 10/13/2016 | 10/13/2016 | 4/20/2017 | 4/20/2017 | 4/21/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB801 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.037 U | 0.036 R | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.037 U | 0.036 U | 0.036 U | **0.04** | **0.027 J** | **0.032 J** | 0.037 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Carbazole | 86-74-8 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.037 U | 0.036 UJ | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Pyridine | 110-86-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.037 U | 0.036 U | 0.036 U | 0.035 U | 0.032 U | 0.033 U | 0.037 U |
| Total SVOCs | TSVOC | NE | NE | ND | ND | ND | **0.04** | **0.145** | **0.032** | ND |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. |
| | | | Location Name | GPEC-SB705 | GPEC-SB709 | GPEC-SB709 | GPEC-SB709 | GPEC-SB801 | GPEC-SB801 | GPEC-SB801 |
| | | | Sample Name | GPEC-SB-705 (29-30) | GPEC-SB-709 (5) | GPEC-SB-709 (21-22) | GPEC-SB-709 (29-30) | GPEC-SB801 | GPEC-SBXX-042017 | GPEC-SB801 |
| | | | Start Depth | 29 | 5 | 21 | 29 | 5 | 5 | 28 |
| | | | End Depth | 30 | 5 | 22 | 30 | 5 | 5 | 29 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 10/13/2016 | 10/13/2016 | 10/13/2016 | 10/13/2016 | 4/20/2017 | 4/20/2017 | 4/21/2017 |
| | | | Parent Sample Code | | | | | | GPEC-SB801 | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.021 U | 0.021 U | 0.022 U | 0.02 U | 0.02 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.051 U | NA | NA | 0.051 U | 0.049 U | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00411 U | NA | NA | 0.00405 U | 0.0039 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.051 U | NA | NA | 0.051 U | 0.049 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.018 U | NA | NA | 0.016 U | 0.016 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.018 U | NA | NA | 0.016 U | 0.016 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.018 U | NA | NA | 0.016 U | 0.016 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **3630** | **6060 J** | **5970** | **7510** | **3330 J** | **2980** | **2700** |
| Antimony | 7440-36-0 | NE | NE | 0.599 U | 0.55 U | 0.591 U | 0.588 U | 0.546 U | 0.542 U | 0.612 U |
| Arsenic | 7440-38-2 | 16 | 16 | **1.07** | **2.58** | **0.801** | **1.02** | **0.941** | **1.07** | **0.67** |
| Barium | 7440-39-3 | 10000 | 820 | **22.1** | **19.8** | **32.7** | **40.6** | **26.3** | **25.1** | **17.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.599 U | 0.55 U | 0.591 U | **0.387 J** | 0.546 U | 0.542 U | 0.612 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.599 U | 0.55 U | 0.591 U | 0.588 U | 0.546 U | 0.542 U | 0.612 U |
| Calcium | 7440-70-2 | NE | NE | **1450** | **827 J** | **1050** | **1900** | **7320** | **8050** | **1150** |
| Chromium | 7440-47-3 | NE | NE | **9.97** | **15.6** | **12.3** | **17.1** | **6.52** | **6.07** | **6.61** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.15 U | 1.1 U | 1.12 U | 1.12 U | 1.04 UJ | 1.04 U | 1.14 U |
| Cobalt | 7440-48-4 | NE | NE | **3.59** | **3.23** | **3.65** | **5.94** | **2.86** | **2.53** | **2.22** |
| Copper | 7440-50-8 | 10000 | 1720 | **12.6** | **11.6** | **16.9** | **11.7** | **14** | **11.4** | **6.91** |
| Iron | 7439-89-6 | NE | NE | **13000** | **15600 J** | **11200** | **13100** | **9260** | **8650** | **8960** |
| Lead | 7439-92-1 | 3900 | 450 | **2.78** | **6.77** | **3.05** | **4.29** | **4.92** | **5.77** | **2.3** |
| Magnesium | 7439-95-4 | NE | NE | **1760** | **1480** | **1870** | **2860** | **3730** | **3700** | **1310** |
| Manganese | 7439-96-5 | 10000 | 2000 | **248** | **184** | **220** | **236** | **163 J** | **161** | **181** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.027 U | **0.029** | 0.025 U | 0.025 U | 0.024 U | 0.023 U | 0.026 U |
| Nickel | 7440-02-0 | 10000 | 130 | **8.07** | **7.49** | **9.14** | **19** | **8.1** | **7.04** | **4.68** |
| Potassium | 7440-09-7 | NE | NE | **611** | **577 J** | **1070** | **1740** | **494** | **504** | **430** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.621** | **0.604** | **0.852** | **0.51 J** | **0.323 J** | **0.511 J** | **0.729** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.599 U | 0.55 U | 0.591 U | 0.588 U | 0.546 UJ | 0.542 U | 0.612 U |
| Sodium | 7440-23-5 | NE | NE | **217** | **88** | **149** | **205** | **148** | **109** | **113** |
| Thallium | 7440-28-0 | NE | NE | 0.599 U | 0.55 U | 0.591 U | 0.588 U | 0.546 U | 0.542 U | 0.612 U |
| Vanadium | 7440-62-2 | NE | NE | **18** | **20.8** | **18.4** | **19.5** | **13.1** | **10.8** | **9.9** |
| Zinc | 7440-66-6 | 10000 | 2480 | **17.3** | **14.4** | **19.8** | **29.9** | **33.4** | **27.2** | **11.3** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 2.8 U | 2.8 U | 2.8 U | 2.6 U | 2.6 U | 2.9 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **1370** | 1000 U | 1000 U | **1500 J** | **5160** | 1000 U |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB801 | GPEC-SB803 | GPEC-SB803 | GPEC-SB803 | GPEC-SB220 | GPEC-SB220 |
| | | | Sample Name | GPEC-SB801 | GPEC-SB803 | GPEC-SB803 | GPEC-SB803 | GPEC-SB220 (5-5.5) | GPEC-SB220 (6-7) |
| | | | Start Depth | 60 | 5 | 31 | 61 | 5 | 6 |
| | | | End Depth | 61 | 5 | 32 | 62 | 5.5 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/24/2017 | 4/18/2017 | 4/18/2017 | 4/19/2017 | 7/5/2012 | 7/13/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | **0.00668** |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | 0.012 U | 0.012 U |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | **0.00668** |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.061 U | 0.055 UJ | 0.064 U | 0.06 U | 0.029 U | 0.031 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.121 U | 0.11 R | 0.128 U | 0.12 U | NA | NA |
| Acrylonitrile | 107-13-1 | NE | NE | 0.121 U | 0.11 UJ | 0.128 U | 0.12 U | NA | NA |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Bromoform | 75-25-2 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.012 U | 0.0062 U |
| Bromomethane | 74-83-9 | NE | NE | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | 0.012 U | 0.0062 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | 0.00586 U | 0.012 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | NA | NA |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00606 U | **0.00615 J** | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | NA | NA |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.012 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.012 U | 0.0062 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.012 U | 0.0062 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.012 U | 0.0062 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | 0.00586 U | 0.0062 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | 0.00586 U | 0.0062 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.012 U | 0.011 UJ | **0.019 CD** | **0.021 CD** | 0.012 U | 0.012 U |
| Styrene | 100-42-5 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | **0.00573 DJ** | **0.0028 J** | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.012 U | 0.011 UJ | 0.013 U | 0.012 U | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | NA | NA |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00606 U | 0.00552 UJ | 0.00641 U | 0.00601 U | 0.00586 U | 0.0062 U |
| Total VOCs | TVOC | NE | NE | **0.00573** | **0.00895** | **0.019** | **0.021** | ND | **0.00668** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.04 U | **0.276** | 0.041 U | 0.038 U | **0.054** | **0.083** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.04 U | **0.136** | 0.041 U | 0.038 U | 0.039 U | **0.076** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.04 U | **0.274** | **0.054** | 0.038 U | **0.133** | **0.223** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.04 U | **0.336** | **0.056** | 0.038 U | **0.222** | **0.185** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.04 U | **1.44** | **0.233** | 0.038 U | **0.681** | **1.33** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.04 U | **0.177** | 0.041 U | 0.038 U | **0.042** | **0.096** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.04 U | **0.052** | 0.041 U | 0.038 U | 0.039 U | **0.046** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.04 U | **0.208** | 0.041 U | 0.038 U | **0.031 J** | **0.086** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.04 U | **0.594** | **0.15** | 0.038 U | **0.45** | **0.789** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.04 U | **1.09** | **0.224** | 0.038 U | **0.619** | **0.914** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.04 U | **0.587** | **0.144** | 0.038 U | **0.334** | **0.52** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.04 U | **0.621** | **0.118** | 0.038 U | **0.296** | **0.621** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.04 U | **0.599** | **0.097** | 0.038 U | **0.247** | **0.577** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.04 U | **0.475** | **0.085** | 0.038 U | **0.183** | **0.421** |
| Chrysene | 218-01-9 | 110 | 1 | 0.04 U | **0.536** | **0.133** | 0.038 U | **0.365** | **0.552** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.04 U | **0.106** | 0.041 U | 0.038 U | **0.065** | **0.104** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.04 U | **0.345** | **0.054** | 0.038 U | **0.195** | **0.189** |
| Total PAHs | TPAH | NE | NE | ND | **7.852** | **1.348** | ND | **3.917** | **6.812** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 8** | **Area 8** | **Area 8** | **Area 8** | **Area 9** | **Area 9** |
| **Investigation Phase** | | | | **Supplemental Inv.** | **Supplemental Inv.** | **Supplemental Inv.** | **Supplemental Inv.** | **Phase 1** | **Phase 1** |
| **Location Name** | | | | **GPEC-SB801** | **GPEC-SB803** | **GPEC-SB803** | **GPEC-SB803** | **GPEC-SB220** | **GPEC-SB220** |
| **Sample Name** | | | | **GPEC-SB801** | **GPEC-SB803** | **GPEC-SB803** | **GPEC-SB803** | **GPEC-SB220 (5-5.5)** | **GPEC-SB220 (6-7)** |
| **Start Depth** | | | | **60** | **5** | **31** | **61** | **5** | **6** |
| **End Depth** | | | | **61** | **5** | **32** | **62** | **5.5** | **7** |
| **Depth Unit** | | | | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| **Sample Date** | | | | **4/24/2017** | **4/18/2017** | **4/18/2017** | **4/19/2017** | **7/5/2012** | **7/13/2012** |
| **Parent Sample Code** | | | | | | | | | |
| **Analyte** | **CAS No.** | **6 NYCRR 375 SCO RESTRICTED USE IND** | **6 NYCRR 375 SCO RESTRICTED USE PoGW** | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.04 U | 0.037 R | 0.041 U | 0.038 U | NA | NA |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | **0.12** | **0.173** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Carbazole | 86-74-8 | NE | NE | 0.04 U | **0.087** | 0.041 U | 0.038 U | **0.027 J** | **0.072** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.04 U | **0.122** | 0.041 U | 0.038 U | **0.024 J** | **0.055** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.04 U | 0.037 R | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Pyridine | 110-86-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | NA | NA |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.04 U | 0.037 U | 0.041 U | 0.038 U | 0.039 U | 0.041 U |
| Total SVOCs | TSVOC | NE | NE | ND | **8.061** | **1.348** | ND | **4.088** | **7.112** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Phase 1 | Phase 1 |
| | | | Location Name | GPEC-SB801 | GPEC-SB803 | GPEC-SB803 | GPEC-SB803 | GPEC-SB220 | GPEC-SB220 |
| | | | Sample Name | GPEC-SB801 | GPEC-SB803 | GPEC-SB803 | GPEC-SB803 | GPEC-SB220 (5-5.5) | GPEC-SB220 (6-7) |
| | | | Start Depth | 60 | 5 | 31 | 61 | 5 | 6 |
| | | | End Depth | 61 | 5 | 32 | 62 | 5.5 | 7 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 4/24/2017 | 4/18/2017 | 4/18/2017 | 4/19/2017 | 7/5/2012 | 7/13/2012 |
| | | | Parent Sample Code | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 UJ |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 UJ |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 UJ |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.023 U | 0.022 U | 0.025 U | 0.022 U | 0.023 U | 0.025 UJ |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | 0.023 U | 0.025 UJ |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | 0.023 U | 0.025 UJ |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.054 U | NA | NA | 0.057 U | 0.061 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00431 U | NA | NA | 0.00454 U | 0.00491 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.054 U | NA | NA | 0.057 U | 0.061 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.018 U | NA | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.018 U | NA | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | 0.018 U | NA | NA | 0.053 U | 0.056 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4410** | **4700 J** | **10400** | **3690** | **9420** | **9070** |
| Antimony | 7440-36-0 | NE | NE | 0.625 U | **0.694** | **1.78** | 0.633 U | 1.28 U | 1.32 U |
| Arsenic | 7440-38-2 | 16 | 16 | **1.03** | **4.34** | **131** | **1.27** | **7.52** | **2.75** |
| Barium | 7440-39-3 | 10000 | 820 | **26.3** | **38.1** | **76.8** | **27.1** | **60.3** | **48.4** |
| Beryllium | 7440-41-7 | 2700 | 47 | 0.625 U | **0.292 J** | **0.401 J** | 0.633 U | **0.432 J** | **0.809** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.625 U | **0.354 J** | 0.664 U | 0.633 U | **0.195 J** | 0.662 U |
| Calcium | 7440-70-2 | NE | NE | **1490** | **5320** | **8400** | **9000** | **8970** | **2030** |
| Chromium | 7440-47-3 | NE | NE | **12.1** | **14.1** | **25.6** | **9.81** | **22.6** | **26.7** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.21 U | 1.1 UJ | 1.28 U | 1.2 U | R | 1.24 UJ |
| Cobalt | 7440-48-4 | NE | NE | **5.15** | **3.12** | **7.8** | **3.31** | **6** | **12.5** |
| Copper | 7440-50-8 | 10000 | 1720 | **13.5** | **60.7** | **998** | **11.1** | **30.7** | **17.2** |
| Iron | 7439-89-6 | NE | NE | **16000** | **9000** | **24000** | **18300** | **18900** | **24800** |
| Lead | 7439-92-1 | 3900 | 450 | **4.43** | **49.1** | **38.3** | **3.03** | **52.7** | **9.33** |
| Magnesium | 7439-95-4 | NE | NE | **2200** | **1510** | **7250** | **5970** | **2480** | **2930** |
| Manganese | 7439-96-5 | 10000 | 2000 | **278** | **104 J** | **435** | **205** | **202** | **244 J** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.029 U | **0.234** | **0.131** | 0.029 U | **0.213** | **0.687 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **11.5** | **12.1** | **51.2** | **7.89** | **11.8** | **19.1** |
| Potassium | 7440-09-7 | NE | NE | **881** | **591** | **2830** | **868** | **1110** | **1040** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.574 J** | **1.36** | **7.26** | **0.577 J** | 2.57 U | 2.65 U |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.625 U | 0.55 UJ | 0.664 U | 0.633 U | 0.641 U | 0.662 U |
| Sodium | 7440-23-5 | NE | NE | **132** | **55.6** | **448** | **173** | **1170** | **186** |
| Thallium | 7440-28-0 | NE | NE | 0.625 U | 0.55 U | **0.367 J** | 0.633 U | **0.223 J** | 0.662 U |
| Vanadium | 7440-62-2 | NE | NE | **23.9** | **15** | **31.1** | **12.7** | **24.6** | **37.4** |
| Zinc | 7440-66-6 | 10000 | 2480 | **21.5** | **63.3** | **90.7** | **20.4** | **83.1** | **58.1** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 3 U | 2.8 U | 3.2 U | 3 U | 1.17 U | 1.24 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **42700** | **5140** | **4450** | **4850** | **11500** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB220 | GPEC-SB220 | GPEC-TP567 | GPEC-TP568 | GPEC-TP569 | GPEC-SB511 | GPEC-SB511 | GPEC-SB511 |
| | | | Sample Name | GPEC-SB220 (17-18) | GPEC-SB220 (86-87) | GPEC-TP567 (10-11) | GPEC-TP568 (3-4) | GPEC-TP569 (6-7) | GPEC-SB511 (7-8) | GPEC-SB511 (9-10) | |
| | | | Start Depth | 17 | 86 | 10 | 3 | 6 | 7 | 9 | |
| | | | End Depth | 18 | 87 | 11 | 4 | 7 | 8 | 10 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 7/13/2012 | 7/13/2012 | 8/9/2017 | 8/8/2017 | 8/3/2017 | 12/26/2017 | 1/15/2018 | |
| | | | Parent Sample Code | | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 U | 0.013 U | 0.014 U | 0.014 U | 0.012 U | 0.011 U | 0.011 UJ | |
| Total BTEX | TBTEX | NE | NE | ND | ND | ND | ND | ND | ND | ND | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.029 U | **0.07** | 0.071 U | 0.072 U | **0.039 DJ** | 0.055 U | 0.056 UJ | |
| Acrolein (propenal) | 107-02-8 | NE | NE | NA | NA | 0.142 U | 0.143 U | 0.115 U | 0.11 U | 0.112 R | |
| Acrylonitrile | 107-13-1 | NE | NE | NA | NA | 0.142 U | 0.143 U | 0.115 U | 0.11 U | 0.112 UJ | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Bromoform | 75-25-2 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Bromomethane | 74-83-9 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 U | **0.01 J** | 0.014 U | 0.014 U | 0.012 U | 0.011 U | 0.011 UJ | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | NA | NA | 0.029 U | 0.029 U | **0.00847 DJ** | 0.011 U | 0.011 UJ | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00569 U | **0.013** | 0.00712 U | 0.00716 U | **0.062 D** | 0.0055 U | 0.00561 UJ | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | NA | NA | 0.014 U | 0.014 U | 0.012 U | 0.011 U | 0.011 UJ | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.011 U | 0.013 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Chloromethane | 74-87-3 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Diisopropyl ether | 108-20-3 | NE | NE | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.00569 U | 0.00637 U | 0.014 U | 0.014 U | 0.012 U | 0.011 U | 0.011 UJ | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.00569 U | 0.00637 U | 0.014 U | 0.014 U | 0.012 U | 0.011 U | 0.011 UJ | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 U | 0.013 U | 0.014 U | 0.014 U | **0.05 CD** | 0.011 U | 0.011 UJ | |
| Styrene | 100-42-5 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Vinyl acetate | 108-05-4 | NE | NE | NA | NA | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00569 U | 0.00637 U | 0.00712 U | 0.00716 U | 0.00573 U | 0.0055 U | 0.00561 UJ | |
| Total VOCs | TVOC | NE | NE | ND | **0.093** | ND | ND | **0.15947** | ND | ND | |
| **PAHs (mg/kg)** | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | 0.042 U | **29.4 D** | **0.102** | **0.538 D** | **0.165 DJ** | **0.168** | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | **0.036 J** | **0.032 J** | **9.75 D** | **0.502** | **0.485 D** | 0.18 U | **0.109** | |
| Anthracene | 120-12-7 | 1000 | 1000 | **0.035 J** | **0.025 J** | **129 D** | **0.162** | **1.34 D** | **0.296 D** | **0.79** | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.038 U | 0.042 U | **311 D** | **2.88** | **1.98 D** | **0.568 D** | **2.53** | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.038 U | 0.042 U | **760 D** | **0.879** | **6.67 D** | **2.05 D** | **6.49** | |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | 0.042 U | **29.7 D** | 0.094 U | **1.15 D** | 0.18 U | **0.146** | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | 0.042 U | **11.8 D** | **0.241** | **3.97 D** | 0.18 U | 0.074 U | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | 0.042 U | **21.5 D** | **1.47** | **3.77 D** | 0.18 U | **0.092** | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.038 U | 0.042 U | **473 D** | **0.938** | **7.2 D** | **0.761 D** | **2.57** | |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.038 U | 0.042 U | **961 D** | **0.908** | **6.93 D** | **1.49 D** | **5.58** | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.038 U | 0.042 U | **439 D** | **2.17** | **3.56 D** | **0.941 D** | **3.89** | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.038 U | 0.042 U | **418 D** | **0.44** | **3.24 D** | **0.76 D** | **3.37** | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.038 U | 0.042 U | **397 D** | **1.74** | **3.18 D** | **0.928 D** | **2.86** | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.038 U | 0.042 U | **262 D** | **1.77** | **2.42 D** | **0.519 D** | **2.49** | |
| Chrysene | 218-01-9 | 110 | 1 | 0.038 U | 0.042 U | **374 D** | **2.43** | **3.7 D** | **0.939 D** | **3.69** | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | 0.042 U | **90.3 D** | **0.525** | **0.845 D** | **0.25 D** | **0.825** | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.038 U | 0.042 U | **274 D** | **1.73** | **1.8 D** | **0.432 D** | **2.2** | |
| Total PAHs | TPAH | NE | NE | **0.071** | **0.057** | **4990.45** | **18.887** | **52.778** | **10.099** | **37.8** | |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB220 | GPEC-SB220 | GPEC-TP567 | GPEC-TP568 | GPEC-TP569 | GPEC-SB511 | GPEC-SB511 |
| | | | Sample Name | GPEC-SB220 (17-18) | GPEC-SB220 (86-87) | GPEC-TP567 (10-11) | GPEC-TP568 (3-4) | GPEC-TP569 (6-7) | GPEC-SB511 (7-8) | GPEC-SB511 (9-10) |
| | | | Start Depth | 17 | 86 | 10 | 3 | 6 | 7 | 9 |
| | | | End Depth | 18 | 87 | 11 | 4 | 7 | 8 | 10 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 7/13/2012 | 7/13/2012 | 8/9/2017 | 8/8/2017 | 8/3/2017 | 12/26/2017 | 1/15/2018 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Benzyl alcohol | 100-51-6 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | **0.439 D** | **0.09** |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | 0.042 U | **20.9 D** | 0.094 U | 0.076 U | 0.18 U | **0.159** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | 0.042 U | **36.6 D** | **0.26** | **0.352 D** | 0.18 U | **0.104** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 UJ |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Pyridine | 110-86-1 | NE | NE | NA | NA | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 UJ |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.042 U | 4.56 U | 0.094 U | 0.076 U | 0.18 U | 0.074 U |
| Total SVOCs | TSVOC | NE | NE | **0.071** | **0.057** | **5047.95** | **19.147** | **53.13** | **10.538** | **38.153** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 1 | Phase 1 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| Location Name | | | | GPEC-SB220 | GPEC-SB220 | GPEC-TP567 | GPEC-TP568 | GPEC-TP569 | GPEC-SB511 | GPEC-SB511 |
| Sample Name | | | | GPEC-SB220 (17-18) | GPEC-SB220 (86-87) | GPEC-TP567 (10-11) | GPEC-TP568 (3-4) | GPEC-TP569 (6-7) | GPEC-SB511 (7-8) | GPEC-SB511 (9-10) |
| Start Depth | | | | 17 | 86 | 10 | 3 | 6 | 7 | 9 |
| End Depth | | | | 18 | 87 | 11 | 4 | 7 | 8 | 10 |
| Depth Unit | | | | ft | ft | ft | ft | ft | ft | ft |
| Sample Date | | | | 7/13/2012 | 7/13/2012 | 8/9/2017 | 8/8/2017 | 8/3/2017 | 12/26/2017 | 1/15/2018 |
| Parent Sample Code | | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.025 U | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.025 U | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.025 U | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 UJ | 0.025 UJ | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 UJ | 0.025 UJ | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 UJ | 0.025 UJ | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 UJ | **0.192 J** | 0.54 U | 0.137 U | 0.112 U | 0.06 U | 0.063 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | 0.022 UJ | 0.025 UJ | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | 0.022 UJ | 0.025 UJ | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | **0.192** | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 1.35 U | 0.069 U | 0.056 U | **0.11** | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | **0.00868** | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | **0.00968** | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.108 U | 0.0055 U | 0.00447 U | 0.00403 U | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 1.35 U | 0.069 U | 0.056 U | 0.05 U | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.023 U | 0.454 U | 0.019 U | 0.018 U | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.023 U | 0.454 U | 0.019 U | 0.018 U | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.023 U | 0.454 U | 0.019 U | 0.018 U | NA |
| **Metals (mg/kg)** | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **5460** | **9150** | **2850** | **228** | **12900** | **8180** | **6330** |
| Antimony | 7440-36-0 | NE | NE | 1.18 U | 1.31 U | **36.7** | **12** | **5.12** | **2.19** | **17.9** |
| Arsenic | 7440-38-2 | 16 | 16 | **0.907** | **1.79** | **41.3** | **50.3** | **18.8** | **4.57** | **6.57** |
| Barium | 7440-39-3 | 10000 | 820 | **34.5** | **44.4** | **649** | **23.4** | **56.4** | **102** | **111** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.452 J** | **0.638 J** | **0.59 J** | 0.784 U | **0.526 J** | **0.501 J** | **0.665** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.589 U | 0.656 U | **1.42** | 0.784 U | **3.33** | **0.357 J** | **0.411 J** |
| Calcium | 7440-70-2 | NE | NE | **1890** | **1520** | **17000** | **8300** | **8330** | **11300** | **32200** |
| Chromium | 7440-47-3 | NE | NE | **18.2** | **32.8** | **174** | **20.3** | **614** | **26.8** | **24.3** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | **0.793 J** | 1.27 UJ | 1.42 U | 1.43 U | 1.15 U | 1.1 U | 1.12 UJ |
| Cobalt | 7440-48-4 | NE | NE | **5.6** | **7.81** | **4.4** | **2.04** | **20.9** | **6.26** | **5.78** |
| Copper | 7440-50-8 | 10000 | 1720 | **10.5** | **16.7** | **445** | **17** | **422** | **47.8** | **77.7** |
| Iron | 7439-89-6 | NE | NE | **14100** | **30400** | **65700** | **166000** | **59200** | **16200** | **19500** |
| Lead | 7439-92-1 | 3900 | 450 | **6.76** | **6.75** | **2270** | **47.1** | **769** | **120** | **232** |
| Magnesium | 7439-95-4 | NE | NE | **1600** | **2330** | **1570** | **264** | **2000** | **4190** | **15200** |
| Manganese | 7439-96-5 | 10000 | 2000 | **128 J** | **621 J** | **311** | **337** | **155** | **251** | **228** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.026** | **0.015 J** | **1.49** | **0.593** | **0.698** | **0.113** | **1.12 J** |
| Nickel | 7440-02-0 | 10000 | 130 | **10.9** | **13.7** | **30.4** | **4.94** | **95.5** | **25.2** | **23** |
| Potassium | 7440-09-7 | NE | NE | **1050** | **1080** | **2200** | **1360** | **1020** | **1030** | **966** |
| Selenium | 7782-49-2 | 6800 | 4 | 2.36 U | 2.62 U | **3.29** | **0.398 J** | **1.17** | **2.48** | **1.36** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.589 U | 0.656 U | **1.71** | 0.784 U | **0.314 J** | 0.573 U | **0.234 J** |
| Sodium | 7440-23-5 | NE | NE | **161** | **113 J** | **83000** | **2000** | **352** | **127** | **226** |
| Thallium | 7440-28-0 | NE | NE | 0.589 U | 0.656 U | **1.51** | 0.784 U | 0.592 U | 0.573 U | 0.581 U |
| Vanadium | 7440-62-2 | NE | NE | **22.4** | **30.4** | **18.1** | **33** | **42.3** | **27** | **31.5** |
| Zinc | 7440-66-6 | 10000 | 2480 | **24.9** | **28.4** | **826** | **63.1** | **1180** | **117** | **157** |
| **Cyanides (mg/kg)** | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 1.14 U | 1.27 U | 3.6 U | **29.4** | **2.7 J** | 2.8 U | 2.8 U |
| **Other (%)** | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **18600** | **373000** | **40300** | **37300** | **45500** | **53900** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB511 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB513 |
| | | | Sample Name | GPEC-SB511 (89-90) | GPEC-SB512 (4-5) | GPEC-SB-XX-122217 | GPEC-SB512 (29-30) | GPEC-SB512 (89-90) | GPEC-SB513 (7-8) |
| | | | Start Depth | 89 | 4 | 4 | 29 | 89 | 7 |
| | | | End Depth | 90 | 5 | 5 | 30 | 90 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/16/2018 | 12/22/2017 | 12/22/2017 | 1/16/2018 | 1/16/2018 | 12/27/2017 |
| | | | Parent Sample Code | | | GPEC-SB512 (4-5) | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00567 UJ | **0.342** | **0.236** | **0.00239 J** | 0.00597 UJ | 0.059 U |
| Toluene | 108-88-3 | 1000 | 0.7 | 0.00567 UJ | **0.307** | **0.246** | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00567 UJ | **0.157** | **0.15** | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.011 UJ | **0.214** | **0.195** | 0.013 UJ | 0.012 UJ | 0.117 U |
| Total BTEX | TBTEX | NE | NE | ND | **1.02** | **0.827** | **0.00239** | ND | ND |
| **Other VOCs (mg/kg)** | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | 0.057 UJ | 0.231 U | 0.232 U | **0.138 J** | 0.06 UJ | 0.234 U |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.113 R | 1.15 U | 1.16 U | 0.132 R | 0.119 R | 1.17 U |
| Acrylonitrile | 107-13-1 | NE | NE | 0.113 UJ | 1.15 U | 1.16 U | 0.132 UJ | 0.119 UJ | 1.17 U |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Bromoform | 75-25-2 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Bromomethane | 74-83-9 | NE | NE | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | 0.011 UJ | 0.231 U | 0.232 U | 0.013 UJ | 0.012 UJ | 0.234 U |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.011 UJ | 0.231 U | 0.232 U | 0.013 UJ | 0.012 UJ | 0.234 U |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00567 UJ | 0.058 U | 0.058 U | **0.029 J** | 0.00597 UJ | 0.059 U |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.011 UJ | 0.231 U | 0.232 U | 0.013 UJ | 0.012 UJ | 0.234 U |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Chloromethane | 74-87-3 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | **0.575** |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 2-Hexanone | 591-78-6 | NE | NE | 0.011 UJ | 0.231 U | 0.232 U | 0.013 UJ | 0.012 UJ | 0.234 U |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.011 UJ | 0.231 U | 0.232 U | 0.013 UJ | 0.012 UJ | 0.234 U |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | 0.011 UJ | 0.115 U | 0.116 U | 0.013 UJ | 0.012 UJ | 0.117 U |
| Styrene | 100-42-5 | NE | NE | 0.00567 UJ | **0.071** | **0.064** | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | **0.00364 J** | 0.059 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00567 UJ | 0.058 U | 0.058 U | 0.00661 UJ | 0.00597 UJ | 0.059 U |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00567 UJ | 0.115 U | 0.116 U | 0.00661 UJ | 0.00597 UJ | 0.117 U |
| Total VOCs | TVOC | NE | NE | ND | **1.091** | **0.891** | **0.16939** | **0.00364** | **0.575** |
| **PAHs (mg/kg)** | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.037 U | **1.37** | **0.947** | **0.601** | 0.04 U | **0.807** |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.037 U | **0.638** | **0.333** | **0.091** | 0.04 U | **0.303** |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.037 U | **0.928** | **1.38** | **0.955** | 0.04 U | **1.88** |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | 0.037 U | **0.239** | **1.25** | **0.85** | 0.04 U | **2.67** |
| Fluoranthene | 206-44-0 | 1000 | 1000 | 0.037 U | **5.9** | **6.95 D** | **4.61** | 0.04 U | **12 D** |
| Fluorene | 86-73-7 | 1000 | 386 | 0.037 U | **0.413** | **0.649** | **0.372** | 0.04 U | **0.712** |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.037 U | **0.241** | **0.192** | **0.31** | 0.04 U | **0.295** |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.037 U | **0.655** | **0.486** | **0.174** | 0.04 U | **0.548** |
| Phenanthrene | 85-01-8 | 1000 | 1000 | 0.037 U | **2.94** | **5.02** | **1.99** | 0.04 U | **8.44 D** |
| Pyrene | 129-00-0 | 1000 | 1000 | 0.037 U | **4.39** | **5.74** | **4.55** | 0.04 U | **8.75 D** |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | 0.037 U | **2.46** | **3.34** | **3.07** | 0.04 U | **5.24** |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | 0.037 U | **1.54** | **1.88** | **1.67** | 0.04 U | **3.66** |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | 0.037 U | **1.68** | **2.07** | **1.19** | 0.04 U | **4.23** |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | 0.037 U | **1.25** | **1.41** | **1.46** | 0.04 U | **2.44** |
| Chrysene | 218-01-9 | 110 | 1 | 0.037 U | **2.5** | **3.11** | **3.04** | 0.04 U | **4.98** |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.037 U | **0.217** | **0.549** | **0.306** | 0.04 U | **0.808** |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | 0.037 U | **0.938** | **1.1** | **0.794** | 0.04 U | **2.31** |
| Total PAHs | TPAH | NE | NE | ND | **28.299** | **36.406** | **26.033** | ND | **60.073** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB511 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB513 |
| | | | Sample Name | GPEC-SB511 (89-90) | GPEC-SB512 (4-5) | GPEC-SB-XX-122217 | GPEC-SB512 (29-30) | GPEC-SB512 (89-90) | GPEC-SB513 (7-8) |
| | | | Start Depth | 89 | 4 | 4 | 29 | 89 | 7 |
| | | | End Depth | 90 | 5 | 5 | 30 | 90 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/16/2018 | 12/22/2017 | 12/22/2017 | 1/16/2018 | 1/16/2018 | 12/27/2017 |
| | | | Parent Sample Code | | | GPEC-SB512 (4-5) | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA |
| Benzidine | 92-87-5 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | 0.037 U | **0.279** | **0.184** | 0.042 U | 0.04 U | 0.038 U |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Carbazole | 86-74-8 | NE | NE | 0.037 U | **0.282** | **0.47** | **0.084** | 0.04 U | **0.714** |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.037 U | **0.233** | **0.309** | **0.191** | 0.04 U | **0.543** |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.037 U | 0.037 U | **0.146** | 0.042 U | 0.04 U | 0.038 U |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Hexachloroethane | 67-72-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Isophorone | 78-59-1 | NE | 4.4 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.037 UJ | 0.037 U | 0.038 U | 0.042 UJ | 0.04 UJ | 0.038 U |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Pyridine | 110-86-1 | NE | NE | 0.037 UJ | 0.037 U | 0.038 U | 0.042 UJ | 0.04 UJ | 0.038 U |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.037 U | 0.037 U | 0.038 U | 0.042 U | 0.04 U | 0.038 U |
| Total SVOCs | TSVOC | NE | NE | ND | **29.093** | **37.515** | **26.308** | ND | **61.33** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB511 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB512 | GPEC-SB513 |
| | | | Sample Name | GPEC-SB511 (89-90) | GPEC-SB512 (4-5) | GPEC-SB-XX-122217 | GPEC-SB512 (29-30) | GPEC-SB512 (89-90) | GPEC-SB513 (7-8) |
| | | | Start Depth | 89 | 4 | 4 | 29 | 89 | 7 |
| | | | End Depth | 90 | 5 | 5 | 30 | 90 | 8 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/16/2018 | 12/22/2017 | 12/22/2017 | 1/16/2018 | 1/16/2018 | 12/27/2017 |
| | | | Parent Sample Code | | | GPEC-SB512 (4-5) | | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.021 U | 0.064 U | 0.065 U | 0.026 U | 0.022 U | 0.065 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | 0.053 U | 0.055 U | NA | NA | 0.054 U |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endrin | 72-20-8 | 410 | 0.06 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Endrin ketone | 53494-70-5 | NE | NE | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Methoxychlor | 72-43-5 | NE | 900 | NA | 0.00427 U | 0.00436 U | NA | NA | 0.00435 U |
| Toxaphene | 8001-35-2 | NE | NE | NA | 0.053 U | 0.055 U | NA | NA | 0.054 U |
| **Herbicides (mg/kg)** | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | 0.019 U | 0.019 U | NA | NA | 0.019 U |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | 0.019 U | 0.019 U | NA | NA | 0.019 U |
| Silvex | 93-72-1 | 1000 | | NA | 0.019 U | 0.019 U | NA | NA | 0.019 U |
| **Metals (mg/kg)** | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **4230** | **6150** | **7100** | **4370** | **4020** | **9160** |
| Antimony | 7440-36-0 | NE | NE | 0.596 U | **1390** | **156** | **1.98** | 0.644 U | **10.9** |
| Arsenic | 7440-38-2 | 16 | 16 | **2.46** | **21.4** | **21.7** | **11.9** | **1.23** | **25.7** |
| Barium | 7440-39-3 | 10000 | 820 | **22.5** | **210** | **211** | **67.9** | **18.2** | **503** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.311 J** | **0.362 J** | **0.321 J** | 0.682 U | 0.644 U | **0.722** |
| Cadmium | 7440-43-9 | 60 | 7.5 | 0.596 U | **2.19** | 0.614 U | **1.3** | 0.644 U | **2** |
| Calcium | 7440-70-2 | NE | NE | **955** | **8280** | **10700** | **60800** | **1870** | **4490** |
| Chromium | 7440-47-3 | NE | NE | **28.1** | **43.1** | **43.7** | **8.94** | **24.7** | **35.9** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.13 UJ | 1.15 U | 1.16 U | 1.32 UJ | 1.19 UJ | 1.17 U |
| Cobalt | 7440-48-4 | NE | NE | **5.98** | **4.66** | **5.08** | **2.7** | **2.79** | **48.8** |
| Copper | 7440-50-8 | 10000 | 1720 | **9.51** | **198** | **241** | **16.8** | **11.6** | **583** |
| Iron | 7439-89-6 | NE | NE | **21700** | **41500** | **42100** | **19100** | **8940** | **51100** |
| Lead | 7439-92-1 | 3900 | 450 | **2.79** | **1120** | **829** | **364** | **1.63** | **1950** |
| Magnesium | 7439-95-4 | NE | NE | **1740** | **1730** | **2730** | **6710** | **1540** | **2250** |
| Manganese | 7439-96-5 | 10000 | 2000 | **273** | **294** | **205** | **271** | **147** | **619** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | 0.025 U | **5.73** | **2.9** | **0.067** | 0.028 U | **0.864** |
| Nickel | 7440-02-0 | 10000 | 130 | **9.32** | **20.7** | **23.8** | **8.08** | **7.66** | **36.9** |
| Potassium | 7440-09-7 | NE | NE | **515** | **982** | **1120** | **432** | **660** | **886** |
| Selenium | 7782-49-2 | 6800 | 4 | **0.718** | **2.78** | **2.64** | **0.911** | **0.535 J** | **2.53** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.596 U | **0.858** | **0.955** | 0.682 U | 0.644 U | **1.58** |
| Sodium | 7440-23-5 | NE | NE | **102** | **888** | **971** | **343** | **408** | **132** |
| Thallium | 7440-28-0 | NE | NE | 0.596 U | **0.421 J** | **0.269 J** | 0.682 U | 0.644 U | 0.628 U |
| Vanadium | 7440-62-2 | NE | NE | **41.4** | **42.5** | **45.6** | **11.5** | **12.9** | **44** |
| Zinc | 7440-66-6 | 10000 | 2480 | **23** | **181** | **254** | **414** | **10.2** | **885** |
| **Cyanides (mg/kg)** | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.8 U | **3.7** | **4.2** | 3.3 U | 3 U | 2.9 U |
| **Other (%)** | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | 1000 U | **64300** | **67400** | **93200** | 1000 U | **70000** |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB513 | GPEC-SB513 | GPEC-SB514 | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 |
| | | | Sample Name | GPEC-SB513 (33-34) | GPEC-SB513 (87-88) | GPEC-SB514 (7-8) | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 (2-3) | GPEC-SB515 (15-16) | GPEC-SBXX-011718 | GPEC-SB515 (89-90) | |
| | | | Start Depth | 33 | 87 | 7 | 42 | 108 | 2 | 15 | 15 | 89 | |
| | | | End Depth | 34 | 88 | 8 | 43 | 109 | 3 | 16 | 16 | 90 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 1/18/2018 | 1/19/2018 | 12/27/2017 | 1/22/2018 | 1/22/2018 | 12/26/2017 | 1/17/2018 | 1/17/2018 | 1/17/2018 | |
| | | | Parent Sample Code | | | | | | | | GPEC-SB515 (15-16) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | | | | | | |
| Benzene | 71-43-2 | 89 | 0.05 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | **2.1** | **3.32** | 0.00556 UJ | |
| Toluene | 108-88-3 | 1000 | 0.7 | **0.00398 J** | 0.00592 UJ | 0.00557 U | **0.0031 DJ** | 0.00584 U | 0.00548 U | **0.632 J** | **1.07 J** | 0.00556 UJ | |
| Ethylbenzene | 100-41-4 | 780 | 1 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | **1.22 J** | **3.5 J** | 0.00556 UJ | |
| m,p-Xylene | 108383/106423 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | 95-47-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | 1330-20-7 | 1000 | 1.6 | 0.012 UJ | 0.012 UJ | 0.011 U | **0.0032 DJ** | 0.012 U | 0.011 U | **1.69 J** | **4.53 J** | 0.011 UJ | |
| Total BTEX | TBTEX | NE | NE | **0.00398** | ND | ND | **0.0063** | ND | ND | **5.642** | **12.42** | ND | |
| **Other VOCs (mg/kg)** | | | | | | | | | | | | | |
| Acetone | 67-64-1 | 1000 | 0.05 | **0.165 J** | **0.108 J** | 0.056 U | 0.057 U | **0.131 D** | 0.055 U | 0.241 U | 0.497 U | **0.042 J** | |
| Acrolein (propenal) | 107-02-8 | NE | NE | 0.117 R | 0.118 R | 0.111 U | 0.113 U | 0.117 U | 0.11 U | 2.41 R | 4.97 R | 0.111 R | |
| Acrylonitrile | 107-13-1 | NE | NE | 0.117 UJ | 0.118 UJ | 0.111 U | 0.113 U | 0.117 U | 0.11 U | 1.2 U | 2.48 U | 0.111 UJ | |
| Bromodichloromethane | 75-27-4 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Bromoform | 75-25-2 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Bromomethane | 74-83-9 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| 2-Butanone (Methyl ethyl ketone) | 78-93-3 | 1000 | 0.3 | **0.023 J** | 0.012 UJ | 0.011 U | 0.011 U | **0.017 D** | 0.011 U | 0.241 U | 0.497 U | 0.011 UJ | |
| t-Butyl alcohol(Tertiary Butyl Alcohol) | 75-65-0 | NE | NE | 0.012 UJ | 0.012 UJ | 0.011 U | 0.011 U | 0.012 U | 0.011 U | 0.241 R | 0.497 R | 0.011 UJ | |
| Carbon disulfide | 75-15-0 | NE | 2.7 | 0.00584 UJ | **0.00727 J** | 0.00557 U | 0.00567 U | **0.016 D** | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Carbon tetrachloride | 56-23-5 | 44 | 0.76 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Chlorobenzene | 108-90-7 | 1000 | 1.1 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Chloroethane | 75-00-3 | NE | 1.9 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| 2-Chloroethyl vinyl ether | 110-75-8 | NE | NE | 0.012 UJ | 0.012 UJ | 0.011 U | 0.011 U | 0.012 U | 0.011 U | 0.241 U | 0.497 U | 0.011 UJ | |
| Chloroform | 67-66-3 | 700 | 0.37 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Chloromethane | 74-87-3 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Dibromochloromethane | 124-48-1 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Dichlorodifluoromethane | 75-71-8 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| 1,1-Dichloroethane | 75-34-3 | 480 | 0.27 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,2-Dichloroethane | 107-06-2 | 60 | 0.02 | **0.131 J** | **0.00516 J** | 0.00557 U | 0.00567 U | **0.013 D** | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| cis-1,2-Dichloroethene | 156-59-2 | 1000 | 0.25 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| trans-1,2-Dichloroethene | 156-60-5 | 1000 | 0.19 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,1-Dichloroethene | 75-35-4 | 1000 | 0.33 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,2-Dichloropropane | 78-87-5 | NE | 0.33 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| cis-1,3-Dichloropropene | 10061-01-5 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| trans-1,3-Dichloropropene | 10061-02-6 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Diisopropyl ether | 108-20-3 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 2-Hexanone | 591-78-6 | NE | NE | 0.012 UJ | 0.012 UJ | 0.011 U | 0.011 U | 0.012 U | 0.011 U | 0.241 U | 0.497 U | 0.011 UJ | |
| Methyl tert-butyl ether | 1634-04-4 | 1000 | 0.93 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 4-Methyl-2-pentanone | 108-10-1 | NE | 1 | 0.012 UJ | 0.012 UJ | 0.011 U | 0.011 U | 0.012 U | 0.011 U | 0.241 U | 0.497 U | 0.011 UJ | |
| Methylene chloride | 75-09-2 | 1000 | 0.05 | **0.018 J** | 0.012 UJ | 0.011 U | **0.02 CD** | **0.019 CD** | 0.011 U | 0.12 U | 0.248 U | 0.011 UJ | |
| Styrene | 100-42-5 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | **0.156 J** | **0.317 J** | 0.00556 UJ | |
| 1,1,2,2-Tetrachloroethane | 79-34-5 | NE | 0.6 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Tetrachloroethene | 127-18-4 | 300 | 1.3 | 0.00584 UJ | **0.025 J** | 0.00557 U | **0.00878 D** | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane(Freon-113) | 76-13-1 | NE | 6 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | 3.4 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| 1,1,1-Trichloroethane | 71-55-6 | 1000 | 0.68 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,1,2-Trichloroethane | 79-00-5 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Trichloroethene | 79-01-6 | 400 | 0.47 | 0.00584 UJ | **0.00506 J** | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Trichlorofluoromethane | 75-69-4 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| 1,2,3-Trichloropropane | 96-18-4 | NE | 0.34 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.06 U | 0.124 U | 0.00556 UJ | |
| Vinyl acetate | 108-05-4 | NE | NE | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| Vinyl chloride | 75-01-4 | 27 | 0.02 | 0.00584 UJ | 0.00592 UJ | 0.00557 U | 0.00567 U | 0.00584 U | 0.00548 U | 0.12 U | 0.248 U | 0.00556 UJ | |
| Total VOCs | TVOC | NE | NE | **0.34098** | **0.15049** | ND | **0.03508** | **0.196** | ND | **5.798** | **12.737** | **0.042** | |
| **PAHs (mg/kg)** | | | | | | | | | | | | | |
| Acenaphthene | 83-32-9 | 1000 | 98 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.038** | **1.48** | **1.07** | 0.035 U | |
| Acenaphthylene | 208-96-8 | 1000 | 107 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.476** | **1.54** | **1.22** | 0.035 U | |
| Anthracene | 120-12-7 | 1000 | 1000 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.142** | **2.94** | **2.56** | 0.035 U | |
| Benzo[g,h,i]perylene | 191-24-2 | 1000 | 1000 | **0.038 J** | 0.037 U | **0.035 J** | 0.036 U | 0.038 U | **0.418** | **3.42** | **2.65** | 0.035 U | |
| Fluoranthene | 206-44-0 | 1000 | 1000 | **0.114** | 0.037 U | **0.101** | 0.036 U | 0.038 U | **0.609** | **9.88** | **7** | 0.035 U | |
| Fluorene | 86-73-7 | 1000 | 386 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | **2.39** | **2.55** | 0.035 U | |
| 2-Methylnaphthalene | 91-57-6 | NE | 36.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.387** | **17** | **19.3** | 0.035 U | |
| Naphthalene | 91-20-3 | 1000 | 12 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.614** | **57.6** | **56.4** | 0.035 U | |
| Phenanthrene | 85-01-8 | 1000 | 1000 | **0.118** | 0.037 U | **0.04** | 0.036 U | 0.038 U | **0.406** | **13** | **10.7** | 0.035 U | |
| Pyrene | 129-00-0 | 1000 | 1000 | **0.103** | 0.037 U | **0.086** | 0.036 U | 0.038 U | **0.57** | **11.4** | **10.2** | 0.035 U | |
| Benz[a]anthracene | 56-55-3 | 11 | 1 | **0.062** | 0.037 U | **0.059** | 0.036 U | 0.038 U | **0.447** | **7.22** | **5.21** | 0.035 U | |
| Benzo[a]pyrene | 50-32-8 | 1.1 | 22 | **0.049** | 0.037 U | **0.038** | 0.036 U | 0.038 U | **0.256** | **5.57** | **3.98** | 0.035 U | |
| Benzo[b]fluoranthene | 205-99-2 | 11 | 1.7 | **0.042** | 0.037 U | **0.04** | 0.036 U | 0.038 U | **0.749** | **3.51** | **2.14** | 0.035 U | |
| Benzo[k]fluoranthene | 207-08-9 | 110 | 1.7 | **0.035 J** | 0.037 U | **0.043** | 0.036 U | 0.038 U | **0.506** | **4.33** | **2.93** | 0.035 U | |
| Chrysene | 218-01-9 | 110 | 1 | **0.069** | 0.037 U | **0.057** | 0.036 U | 0.038 U | **0.767** | **7.75** | **5.25** | 0.035 U | |
| Dibenz[a,h]anthracene | 53-70-3 | 1.1 | 1000 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.189** | **1.16** | **0.696** | 0.035 U | |
| Indeno[1,2,3-cd]pyrene | 193-39-5 | 11 | 8.2 | **0.034 J** | 0.037 U | 0.037 U | 0.036 U | 0.038 U | **0.332** | **2.85** | **1.92** | 0.035 U | |
| Total PAHs | TPAH | NE | NE | **0.664** | ND | **0.499** | ND | ND | **6.906** | **153.04** | **135.776** | ND | |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB513 | GPEC-SB513 | GPEC-SB514 | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 |
| | | | Sample Name | GPEC-SB513 (33-34) | GPEC-SB513 (87-88) | GPEC-SB514 (7-8) | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 (2-3) | GPEC-SB515 (15-16) | GPEC-SBXX-011718 | GPEC-SB515 (89-90) | |
| | | | Start Depth | 33 | 87 | 7 | 42 | 108 | 2 | 15 | 15 | 89 | |
| | | | End Depth | 34 | 88 | 8 | 43 | 109 | 3 | 16 | 16 | 90 | |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | |
| | | | Sample Date | 1/18/2018 | 1/19/2018 | 12/27/2017 | 1/22/2018 | 1/22/2018 | 12/26/2017 | 1/17/2018 | 1/17/2018 | 1/17/2018 | |
| | | | Parent Sample Code | | | | | | | | GPEC-SB515 (15-16) | | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | | |
| **Other SVOCs (mg/kg)** | | | | | | | | | | | | | |
| Aniline | 62-53-3 | NE | 0.33 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Azobenzene | 103-33-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Benzidine | 92-87-5 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Benzoic acid | 65-85-0 | NE | 2.7 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Benzyl alcohol | 100-51-6 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Bis(chloroisopropyl)ether | 108-60-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Bis(2-chloroethyl)ether | 111-44-4 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Bis(2-chloroethoxy)methane | 111-91-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Bis(2-ethylhexyl)phthalate | 117-81-7 | NE | 435 | **0.099** | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Bromophenyl phenyl ether | 101-55-3 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Butyl benzyl phthalate | 85-68-7 | NE | 122 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Carbazole | 86-74-8 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | **0.815** | **0.595** | 0.035 U | |
| 4-Chloro-3-methylphenol | 59-50-7 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Chloroaniline | 106-47-8 | NE | 0.22 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Chloronaphthalene | 91-58-7 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Chlorophenol | 95-57-8 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Chlorophenyl phenyl ether | 7005-72-3 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Dibenzofuran | 132-64-9 | 1000 | 6.2 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | **1.13** | **1.15** | 0.035 U | |
| 1,2-Dichlorobenzene | 95-50-1 | 1000 | 1.1 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 1,3-Dichlorobenzene | 541-73-1 | 560 | 2.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 1,4-Dichlorobenzene | 106-46-7 | 250 | 1.8 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 3,3-Dichlorobenzidine | 91-94-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4-Dichlorophenol | 120-83-2 | NE | 0.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Diethyl phthalate | 84-66-2 | NE | 7.7 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Dimethyl phthalate | 131-11-3 | NE | 27 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4-Dimethylphenol | 105-67-9 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Di-n-butyl phthalate | 84-74-2 | NE | 8.1 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4,6-Dinitro-2-methylphenol | 534-52-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4-Dinitrophenol | 51-28-5 | NE | 0.2 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4-Dinitrotoluene | 121-14-2 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,6-Dinitrotoluene | 606-20-2 | NE | 0.17 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Di-n-octyl phthalate | 117-84-0 | NE | 120 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Fluorobiphenyl | 321-60-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | 367-12-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-Diphenylhydrazine | 122-66-7 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Hexachlorobenzene | 118-74-1 | 12 | 1.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Hexachlorobutadiene | 87-68-3 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Hexachlorocyclopentadiene | 77-47-4 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Hexachloroethane | 67-72-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Isophorone | 78-59-1 | NE | 4.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Methylphenol (o-Cresol) | 95-48-7 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Methylphenol (p-Cresol) | 106-44-5 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Nitroaniline | 88-74-4 | NE | 0.4 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 3-Nitroaniline | 99-09-2 | NE | 0.5 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Nitroaniline | 100-01-6 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Nitrobenzene | 98-95-3 | NE | 0.17 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2-Nitrophenol | 88-75-5 | NE | 0.3 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 4-Nitrophenol | 100-02-7 | NE | 0.1 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| N-Nitrosodimethylamine | 62-75-9 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| N-Nitrosodi-n-propylamine | 621-64-7 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| N-Nitrosodiphenylamine | 86-30-6 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Pentachlorophenol | 87-86-5 | 55 | 0.8 | 0.038 UJ | 0.037 UJ | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 UJ | 0.405 UJ | 0.035 UJ | |
| Phenol | 108-95-2 | 1000 | 0.33 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Pyridine | 110-86-1 | NE | NE | 0.038 UJ | 0.037 UJ | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 UJ | 0.405 UJ | 0.035 UJ | |
| 2,4,6-Tribromophenol | 118-79-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | 120-82-1 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4,5-Trichlorophenol | 95-95-4 | NE | 0.1 | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| 2,4,6-Trichlorophenol | 88-06-2 | NE | NE | 0.038 U | 0.037 U | 0.037 U | 0.036 U | 0.038 U | 0.036 U | 0.398 U | 0.405 U | 0.035 U | |
| Total SVOCs | TSVOC | NE | NE | **0.763** | ND | **0.499** | ND | ND | **6.906** | **154.985** | **137.521** | ND | |

**Table 12. Subsurface Soil Analytical Results - Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
| | | | Location Name | GPEC-SB513 | GPEC-SB513 | GPEC-SB514 | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 | GPEC-SB515 |
| | | | Sample Name | GPEC-SB513 (33-34) | GPEC-SB513 (87-88) | GPEC-SB514 (7-8) | GPEC-SB514 | GPEC-SB514 | GPEC-SB515 (2-3) | GPEC-SB515 (15-16) | GPEC-SBXX-011718 | GPEC-SB515 (89-90) |
| | | | Start Depth | 33 | 87 | 7 | 42 | 108 | 2 | 15 | 15 | 89 |
| | | | End Depth | 34 | 88 | 8 | 43 | 109 | 3 | 16 | 16 | 90 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 1/18/2018 | 1/19/2018 | 12/27/2017 | 1/22/2018 | 1/22/2018 | 12/26/2017 | 1/17/2018 | 1/17/2018 | 1/17/2018 |
| | | | Parent Sample Code | | | | | | | | GPEC-SB515 (15-16) | |
| Analyte | CAS No. | 6 NYCRR 375 SCO RESTRICTED USE IND | 6 NYCRR 375 SCO RESTRICTED USE PoGW | | | | | | | | | |
| **PCBs (mg/kg)** | | | | | | | | | | | | |
| Aroclor 1016 | 12674-11-2 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1221 | 11104-28-2 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1232 | 11141-16-5 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1242 | 53469-21-9 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1248 | 12672-29-6 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1254 | 11097-69-1 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1260 | 11096-82-5 | NE | NE | 0.022 U | 0.022 U | 0.022 U | 0.022 U | 0.023 U | 0.063 U | 0.07 U | 0.074 U | 0.022 U |
| Aroclor 1262 | 37324-23-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | 11100-14-4 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | 1336-36-3 | 25 | 3.2 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Pesticides (mg/kg)** | | | | | | | | | | | | |
| Aldrin | 309-00-2 | 1.4 | 0.19 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| alpha-BHC | 319-84-6 | 6.8 | 0.02 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| beta-BHC | 319-85-7 | 14 | 0.09 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| gamma-BHC | 58-89-9 | 23 | 0.1 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| delta-BHC | 319-86-8 | 1000 | 0.25 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Chlordane (Technical) | 12789-03-6 | NE | NE | NA | NA | 0.056 U | NA | NA | 0.052 U | NA | NA | NA |
| Chlordane | 57-74-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | 5103-71-9 | 47 | 2.9 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| gamma-Chlordane | 5103-74-2 | NE | 14 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| 4,4-DDD | 72-54-8 | 180 | 14 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| 4,4'-DDE | 72-55-9 | 120 | 17 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| 4,4'-DDT | 50-29-3 | 94 | 136 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Dieldrin | 60-57-1 | 2.8 | 0.1 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endosulfan I | 959-98-8 | 920 | 102 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endosulfan II | 33213-65-9 | 920 | 102 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endosulfan sulfate | 1031-07-8 | 920 | 1000 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endrin | 72-20-8 | 410 | 0.06 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endrin aldehyde | 7421-93-4 | NE | NE | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Endrin ketone | 53494-70-5 | NE | NE | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Heptachlor | 76-44-8 | 29 | 0.38 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Heptachlor epoxide | 1024-57-3 | NE | 0.02 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Methoxychlor | 72-43-5 | NE | 900 | NA | NA | 0.00445 U | NA | NA | 0.00417 U | NA | NA | NA |
| Toxaphene | 8001-35-2 | NE | NE | NA | NA | 0.056 U | NA | NA | 0.052 U | NA | NA | NA |
| **Herbicides (mg/kg)** | | | | | | | | | | | | |
| 2,4-D (2,4-Dichlorophenoxyacetic acid) | 94-75-7 | NE | 0.5 | NA | NA | 0.019 U | NA | NA | 0.018 U | NA | NA | NA |
| 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid) | 93-76-5 | NE | 1.9 | NA | NA | 0.019 U | NA | NA | 0.018 U | NA | NA | NA |
| Silvex | 93-72-1 | 1000 | | NA | NA | 0.019 U | NA | NA | 0.018 U | NA | NA | NA |
| **Metals (mg/kg)** | | | | | | | | | | | | |
| Aluminum | 7429-90-5 | NE | NE | **8210** | **6480** | **10800** | **3840** | **5780** | **3590** | **7180** | **7310** | **2660** |
| Antimony | 7440-36-0 | NE | NE | **0.664** | 0.59 U | 0.555 U | 0.586 U | 0.612 U | **4.4** | **10.2** | **7.75** | 0.583 U |
| Arsenic | 7440-38-2 | 16 | 16 | **3.87** | **7.04** | **3.15** | **2.42** | **10.1** | **9.41** | **29.8** | **18.1** | **0.785** |
| Barium | 7440-39-3 | 10000 | 820 | **114** | **27.9** | **44.5** | **36.9** | **19.8** | **143** | **378** | **267** | **14.5** |
| Beryllium | 7440-41-7 | 2700 | 47 | **0.531 J** | **0.481 J** | **0.618** | **0.434 J** | **0.415 J** | 0.583 U | **0.564 J** | **0.65** | 0.583 U |
| Cadmium | 7440-43-9 | 60 | 7.5 | **0.476 J** | 0.59 U | 0.555 U | 0.586 U | 0.612 U | 0.583 U | **1.02** | **0.974** | 0.583 U |
| Calcium | 7440-70-2 | NE | NE | **2730** | **1320** | **1200** | **1640** | **1140** | **4840** | **8980** | **6030** | **535** |
| Chromium | 7440-47-3 | NE | NE | **34.9** | **19.3** | **24.9** | **20** | **20.1** | **14.1** | **4830 J** | **2660 J** | **12.6** |
| Chromium (VI) | 18540-29-9 | 800 | 19 | 1.17 UJ | 1.18 UJ | 1.11 U | **0.282 J** | 1.17 U | 1.1 U | 1.2 UJ | 1.24 UJ | 1.11 UJ |
| Cobalt | 7440-48-4 | NE | NE | **7.44** | **7.93** | **8.25** | **4.98** | **9.71** | **2.79** | **12.9** | **12.9** | **3.63** |
| Copper | 7440-50-8 | 10000 | 1720 | **33.9** | **10.1** | **19.3** | **13.7** | **8.82** | **137** | **715 J** | **404 J** | **3.44** |
| Iron | 7439-89-6 | NE | NE | **28500** | **19500** | **30200** | **24800** | **18700** | **14100** | **75400** | **64900** | **9790** |
| Lead | 7439-92-1 | 3900 | 450 | **173** | **4.8** | **12** | **4.24** | **4.78** | **1010** | **1760 J** | **5000 J** | **1.82** |
| Magnesium | 7439-95-4 | NE | NE | **2170** | **2680** | **2510** | **1580** | **2390** | **1500** | **2180** | **2190** | **861** |
| Manganese | 7439-96-5 | 10000 | 2000 | **527** | **156** | **618** | **504** | **81.1** | **112** | **1080** | **920** | **73.9** |
| Mercury | 7439-97-6 | 5.7 | 0.73 | **0.128** | 0.03 U | 0.028 U | 0.028 U | 0.027 U | **0.75** | **1.29 J** | **0.572 J** | 0.025 U |
| Nickel | 7440-02-0 | 10000 | 130 | **16.6** | **13.9** | **15.4** | **9.22** | **13** | **10.8** | **43.7** | **40.2** | **6.66** |
| Potassium | 7440-09-7 | NE | NE | **1270** | **1360** | **978** | **921** | **1380** | **667** | **832** | **841** | **419** |
| Selenium | 7782-49-2 | 6800 | 4 | **1.67** | **1.45** | **2.48** | **1.81** | **1.55** | **2.89** | **1.91** | **1.76** | **0.568 J** |
| Silver | 7440-22-4 | 6800 | 8.3 | 0.63 U | 0.59 U | 0.555 U | 0.586 U | 0.612 U | **0.414 J** | **0.382 J** | **0.471 J** | 0.583 U |
| Sodium | 7440-23-5 | NE | NE | **574** | **446** | **53.4 J** | **270** | **550** | **422** | **300** | **277** | **118** |
| Thallium | 7440-28-0 | NE | NE | 0.63 U | 0.59 U | 0.555 U | **0.245 J** | 0.612 U | 0.583 U | 0.617 U | 0.638 U | 0.583 U |
| Vanadium | 7440-62-2 | NE | NE | **38.4** | **24.4** | **34.9** | **27.8** | **25.4** | **16.1** | **40.1** | **41.3** | **14.7** |
| Zinc | 7440-66-6 | 10000 | 2480 | **166** | **33.9** | **40.4** | **19.9** | **26.4** | **94.4** | **651** | **607** | **12.4** |
| **Cyanides (mg/kg)** | | | | | | | | | | | | |
| Free Cyanide | FREECN | NE | NE | 2.9 U | 3 U | 2.8 U | 2.8 U | 2.9 U | 2.7 U | 3 U | 3.1 U | 2.8 U |
| **Other (%)** | | | | | | | | | | | | |
| Percent Moisture | MOIST | NE | ***NE*** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Percent Solids | SOLIDS | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | TOC | NE | NE | **5160** | **5490** | 1000 U | 1500 U | **2800** | **302000** | **43700** | **27300** | 1000 U |

**Notes for Tables 10, 11 & 12**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

**Notes:**

mg/kg - milligrams/kilogram or parts per million (ppm)
mg/L - milligrams/liter
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
PCBs - polychlorinated biphenyls
TCLP- toxicity characteristics leaching procedure
Total BTEX, Total VOCs, Total PAHs, Total SVOCs, and Total PCBs are calculated using detects only.

6 NYCRR -New York State Register and Official Compilation of Codes, Rules and Regulations of the State of New York
6 NYCRR 375 RESTRICTED USE IND SCO - regulatory comparison against NYCRR, Chapter IV, Part 375-6 Restricted Use Industrial Soil Cleanup Objectives

NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration
Gray shading and bolding indicates that the detected result value exceeds established 6 NYCRR IND SCO

**Data Qualifiers:**

J - estimated value
JN - analyte is presumptively present at an approximated quantity
U - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated
R - rejected
B - Analyte detected in the associated method blank
* - Duplicate analysis not within control limits
HF - indicate pH was performed in the laboratory outside the 15 minute timeframe.

UH - indicates not detected to the reporting limit for organic analysis and the method detection limit for inorganic analysis and sample prepped or analyzed beyond hold time

**Table 13. Typical Background Metals - Eastern United States**
**National Grid**
**Remedial Investigation Report**
**Greenpoint, New York**

| Metals | Background Levels - Eastern USA (mg/kg) |
|---|---|
| Aluminum | 7,000 - > 100,000 |
| Antimony | < 1 - 8.8 |
| Arsenic | < 0.1 - 73 |
| Barium | 10 - 1,500 |
| Beryllium | < 1 - 7 |
| Cadmium | NE |
| Calcium | 100 - 280,000 |
| Chromium | 1 - 1,000 |
| Cobalt | < 0.3 - 70 |
| Copper | < 1 - 700 |
| Iron | 100 - >100,000 |
| Lead | > 10 - 300 |
| Magnesium | 50 - 50,000 |
| Manganese | < 2 - 7,000 |
| Mercury | 0.01 - 3.4 |
| Nickel | < 5 - 700 |
| Potassium | 50 - 37,000 |
| Selenium | < 0.1 - 3.9 |
| Silver | NE |
| Sodium | <500 - 50,000 |
| Thallium | NE |
| Vanadium | <7 - 300 |
| Zinc | < 5 - 2,900 |

**Notes:**

NE = Not established

mg/kg = milligrams/kilogram

Source: Shacklette, H.T., and Boerngen, J.G., 1984. Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States. U.S. Geological Survey Professional Paper 1270. 105p.

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | | Location Name | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10S | GPEC-GT-10S | GPEC-GT-10S | GPEC-MW-103 | GPEC-MW-103 |
| | | | | Sample Name | GPEC-GT-10D | GPEC-GT-10D | GPEC-GT-10 (MW-17I) | GPEC-GT-10S | GPEC-GT10S | GPEC-GT-10S (MW-17S) | GPEC-MW-103 | GPEC-MW103 |
| | | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | | Sample Date | 10/20/2009 | 12/18/2012 | 11/7/2024 | 10/20/2009 | 12/13/2012 | 11/13/2024 | 8/31/2010 | 12/20/2012 |
| | | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 5 U | 1 U | 1 U | **3.2 J** | **0.455 J** | 1 U | **1.1 J** | 1 U |
| Toluene | | 108-88-3 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **74** | **0.483** |
| Ethylbenzene | | 100-41-4 | 5 | 5 U | 1 U | 1 U | **2.6 J** | 1 U | 1 U | **190** | **16** |
| o-Xylene | | 95-47-6 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Total Xylene | | 1330-20-7 | 5 | 5 U | 2 U | NA | 5 U | 2 U | NA | **180** | **20.1** |
| Total BTEX | | TBTEX | NE | ND | ND | NA | **5.8** | **0.455** | ND | **445.1** | **36.583** |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 10 UJ | 5 U | 5 U | 10 UJ | 5 U | 5 U | 10 UJ | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | NA | NA | R | NA | NA | 20 U |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | NA | 20 U | NA | NA | 20 U |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 5 UJ | 1 U | 1 U | 5 UJ | 1 U | 1 U | 5 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Chloroform | | 67-66-3 | 7 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **2.3 J** | 1 U |
| Chloromethane | | 74-87-3 | 5 | 5 UJ | 1 U | 1 U | 5 UJ | 1 U | 1 U | 5 UJ | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **4 J** | **2.07** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | **1.43** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 5 U | 1 U | **0.97 J** | 5 U | 1 U | 1 U | **1.3 J** | **0.852** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 2-Hexanone | | 591-78-6 | 50* | 10 U | 2 U | 5 U | 10 U | 2 U | 5 U | 10 U | 2 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U |
| Methylene chloride | | 75-09-2 | 5 | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U |
| Styrene | | 100-42-5 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | 5 U | NA | NA | 5 U | NA | NA |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 10 UJ | 1 U | 5 U | 10 UJ | 1 U | 5 U | 10 U | 1 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10S | GPEC-GT-10S | GPEC-GT-10S | GPEC-MW-103 | GPEC-MW-103 |
| | | | Sample Name | GPEC-GT-10D | GPEC-GT-10D | GPEC-GT-10 (MW-17I) | GPEC-GT-10S | GPEC-GT10S | GPEC-GT-10S (MW-17S) | GPEC-MW-103 | GPEC-MW103 |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | Sample Date | 10/20/2009 | 12/18/2012 | 11/7/2024 | 10/20/2009 | 12/13/2012 | 11/13/2024 | 8/31/2010 | 12/20/2012 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **4.8 J** | **2.76** |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Total VOCs | | TVOC | NE | ND | ND | NA | **5.8** | **0.455** | ND | **457.5** | **43.695** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 4 U | 1 U | 10 U | **20** | **6.3** | **1.1 J** | **71 J** | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 4 U | 1 U | 10 U | **2.9 J** | **0.498 J** | 10 U | **8.4 J** | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 4 U | 1 U | 10 U | **2.6 J** | **0.665 J** | 10 U | 88 U | 1 U |
| Fluorene | | 86-73-7 | 50* | 4 U | 1 U | 10 U | **7.3** | **1.62** | 10 U | **27 J** | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 4 U | 1 U | 10 U | **35** | 1 U | 10 U | **170** | 1 U |
| Naphthalene | | 91-20-3 | 10* | 4 U | 1 U | 2 U | **73** | **0.414 J** | 2 U | **900** | **2.64** |
| Phenanthrene | | 85-01-8 | 50* | 4 U | 1 U | 10 U | **15** | **1.74** | 10 U | **50 J** | 1 U |
| Pyrene | | 129-00-0 | 50* | 4 U | 1 U | 10 U | **2.8 J** | 1 U | 10 U | 88 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 4 U | 0.1 U | 1 U | **0.49 J** | 0.1 U | 1 U | 88 U | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U | 88 U | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 4 U | 0.1 U | 2 U | **3.6 J** | 0.1 U | 2 U | 88 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 4 U | 0.1 U | 1 U | **3.4 J** | 0.1 U | 1 U | 88 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 4 U | 1 U | 2 U | **0.47 J** | 1 U | 2 U | 88 U | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U | 88 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 4 U | 0.1 U | 2 U | 4.2 U | 0.1 U | 2 U | 88 U | 0.1 U |
| Total PAHs | | TPAH | NE | ND | ND | | **166.56** | **11.237** | **1.1** | **1226.4** | **2.64** |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 U | NA | NA | 2 U | NA | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 4 U | NA | NA | 4.2 U | NA | NA | 88 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 88 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U | 88 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Carbazole | | 86-74-8 | NE | 4 U | 1 U | 10 U | **1.6 J** | **0.479 J** | 10 U | 88 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 5 U | 1 U | 10 U | 5.3 U | 1 U | 10 U | 110 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 4 U | 1 U | 10 U | **1.6 J** | **0.565 J** | 10 U | 88 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 4 U | NA | NA | 4.2 U | NA | NA | 88 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 4 U | NA | NA | 4.2 U | NA | NA | 88 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 4 U | NA | NA | 4.2 U | NA | NA | 88 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | **1.21** |
| Dimethyl phthalate | | 131-11-3 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 25 U | 1 U | 20 U | 26 U | 1 U | 20 U | 550 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 25 U | 1 U | 40 U | 26 U | 1 U | 40 U | 550 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U | 88 U | 1 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | | Location Name | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10S | GPEC-GT-10S | GPEC-GT-10S | GPEC-MW-103 | GPEC-MW-103 |
| | | | | Sample Name | GPEC-GT-10D | GPEC-GT-10D | GPEC-GT-10 (MW-17I) | GPEC-GT-10S | GPEC-GT10S | GPEC-GT-10S (MW-17S) | GPEC-MW-103 | GPEC-MW103 |
| | | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | | Sample Date | 10/20/2009 | 12/18/2012 | 11/7/2024 | 10/20/2009 | 12/13/2012 | 11/13/2024 | 8/31/2010 | 12/20/2012 |
| | | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 4 U | 0.02 U | 1 U | 4.2 U | 0.02 U | 1 U | 88 U | 0.02 U | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 88 U | 1 U | |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 4 UJ | 1 U | 10 U | 4.2 UJ | 1 U | 10 U | 88 UJ | 1 U | |
| Hexachloroethane | | 67-72-1 | 5 | 4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U | 88 U | 1 U | |
| Isophorone | | 78-59-1 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 4 U | 1 U | 10 U | **0.5 J** | 1 U | 10 U | 88 U | 1 U | |
| 2-Nitroaniline | | 88-74-4 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| 3-Nitroaniline | | 99-09-2 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| 4-Nitroaniline | | 100-01-6 | 5 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| Nitrobenzene | | 98-95-3 | 0.4 | 4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 88 U | 1 U | |
| 2-Nitrophenol | | 88-75-5 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| 4-Nitrophenol | | 100-02-7 | NE | 10 U | 1 U | 20 U | 11 U | 1 U | 20 U | 220 U | 1 U | |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 88 U | 1 U | |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| Pentachlorophenol | | 87-86-5 | 1 | 25 U | 0.1 U | 20 U | 26 U | 0.1 U | 20 U | 550 U | 0.1 U | |
| Phenol | | 108-95-2 | 1 | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 4 U | NA | NA | 4.2 U | NA | NA | 88 U | NA | |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 U | NA | NA | 10 U | NA | NA | |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | NA | |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 1 U | 10 U | 11 U | 1 U | 10 U | 220 U | 1 U | |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U | 88 U | 1 U | |
| Total SVOCs | | TSVOC | NE | ND | ND | | **170.26** | **12.281** | **1.1** | **1226.4** | **3.85** | |
| **PFAS** | ng/L | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | | Location Name | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10 | GPEC-GT-10S | GPEC-GT-10S | GPEC-GT-10S | GPEC-MW-103 | GPEC-MW-103 |
| | | | | Sample Name | GPEC-GT-10D | GPEC-GT-10D | GPEC-GT-10 (MW-17I) | GPEC-GT-10S | GPEC-GT10S | GPEC-GT-10S (MW-17S) | GPEC-MW-103 | GPEC-MW103 |
| | | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | | Sample Date | 10/20/2009 | 12/18/2012 | 11/7/2024 | 10/20/2009 | 12/13/2012 | 11/13/2024 | 8/31/2010 | 12/20/2012 |
| | | | | Parent Sample Code | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 UJ | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.5 U | 0.05 U | 0.4 U | 0.54 U | 0.05 UJ | 0.4 U | 0.56 U | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 U | 0.4 U | NA | 0.05 UJ | 0.4 U | NA | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 U | 0.4 U | NA | 0.05 UJ | 0.4 U | NA | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 U | | ND | 0.05 UJ | ND | ND | 0.05 U |
| **Dissolved Metals** | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | 40 U | NA | NA | 40 U | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | **0.81** | NA | NA | **0.55 J** | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | 2 U | NA | NA | **32.6** | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | **90.1** | NA | NA | **339** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.80 U | NA | NA | 0.8 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2.0 U | NA | NA | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | **90700** | NA | NA | **195000** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | 4.0 U | NA | NA | 4 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | **0.68 J** | NA | NA | 4 U | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | 4.0 U | NA | NA | 4 U | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | 120 U | NA | NA | 120 U | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | 1.2 U | NA | NA | 1.2 U | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **30100** | NA | NA | **34400** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | **1100** | NA | NA | **489** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | NA | 0.2 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | **2.7 J** | NA | NA | 4 U | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | **17000** | NA | NA | **28200** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | 2.5 U | NA | NA | 2.5 U | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | NA | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **195000** | NA | NA | **241000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.80 U | NA | NA | 0.8 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | 4 U | NA | NA | 4 U | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | **26.2** | NA | NA | 16 U | NA | NA |
| **Total Metals** | µg/L | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **224** | **523** | NA | **1100** | 40 U | NA | 250 U | 40 U |
| Antimony | | 7440-36-0 | 3 | 15 U | 4 U | NA | 15 U | 4 U | NA | 15 U | 4 U |
| Arsenic | | 7440-38-2 | 25 | 15 U | 2 U | NA | **18.9** | **41.6** | NA | **8.3 J** | 2 U |
| Barium | | 7440-39-3 | 1000 | **77.6** | **43** | NA | **346** | **655** | NA | **44.6** | **33.6** |
| Beryllium | | 7440-41-7 | 3* | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U |
| Cadmium | | 7440-43-9 | 5 | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U |
| Calcium | | 7440-70-2 | NE | **68600** | **32100** | NA | **169000** | **640000** | NA | **91400** | **115000** |
| Chromium | | 7440-47-3 | 50 | 5 U | **2.27 J** | NA | **3.7 J** | 8 U | NA | **1.7 J** | 8 U |
| Chromium (VI) | | 18540-29-9 | NE | 10 U | NA | NA | 10 U | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | **0.58 J** | 8 U | NA | **1.4 J** | 8 U | NA | 5 U | 8 U |
| Copper | | 7440-50-8 | 200 | **1.7 J** | **12.5** | NA | **28.7** | 8 U | NA | 10 U | 8 U |
| Iron | | 7439-89-6 | 300 | **1620** | **1980** | NA | **2910** | **4470** | NA | **7780** | **2250** |
| Lead | | 7439-92-1 | 25 | 15 U | **14** | NA | **55.5** | **1.5 J** | NA | 15 U | 2 U |
| Magnesium | | 7439-95-4 | 35000* | **23500** | **11200** | NA | **38600** | **169000** | NA | **41500** | **106000** |
| Manganese | | 7439-96-5 | 300 | **339** | **141** | NA | **431** | **1370** | NA | **2080** | **1900** |
| Mercury | | 7439-97-6 | 0.7 | 0.4 U | 0.5 U | NA | **0.14 J** | 0.5 U | NA | 0.4 U | 0.5 U |
| Nickel | | 7440-02-0 | 100 | **1.8 J** | **3.41 J** | NA | **5.4** | 4 U | NA | **4 J** | **1.16** |
| Potassium | | 7440-09-7 | NE | **23900** | **8140** | NA | **26000** | **56300** | NA | **12100** | **30700** |
| Selenium | | 7782-49-2 | 10 | 38 U | 8 U | NA | 38 U | 8 U | NA | 38 U | 8 U |
| Silver | | 7440-22-4 | 50 | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **142000** | **50600** | NA | **239000** | **1440000** | NA | **127000** | **657000** |
| Thallium | | 7440-28-0 | 0.5* | 15 UJ | 2 U | NA | 15 UJ | 2 U | NA | 15 U | 2 U |
| Vanadium | | 7440-62-2 | NE | **4.5 J** | **10** | NA | **6.4** | 8 U | NA | **3.1 J** | 8 U |
| Zinc | | 7440-66-6 | 2000* | **5.5 J** | **88.5** | NA | **38.3** | 8 U | NA | 25 U | **15.6** |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 10 U | 2 U | NA | **4 J** | **10** | NA | 10 U | 2 U |
| Total Cyanide | | 57-12-5 | 200 | 10 U | 20 U | NA | **582** | **130** | NA | **11.6 J** | 20 U |
| **Other** | µg/L | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | 110 U | NA | NA | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | NA | NA | **790** | NA | NA | 110 U | NA | NA |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | **350** | NA | NA | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | **350** | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental | Supplemental | Phase 1 | Phase 1 | Phase 1 | Supplemental Inv. | Supplemental Inv. | Supplemental |
| Location Name | | | | GPEC-MW-103 | GPEC-MW-103 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D | GPEC-MW1D |
| Sample Name | | | | GPEC-MW-103 | DUP-01 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D FILT | GPEC-MW1D |
| Screen Zone | | | | Intermediate | Intermediate | Shallow | Shallow | Shallow | Deep | Deep | Deep |
| Sample Date | | | | 11/7/2024 | 11/7/2024 | 11/14/2011 | 12/5/2011 | 12/22/2012 | 3/24/2017 | 3/24/2017 | 11/7/2024 |
| Parent Sample Code | | | | | GPEC-MW103 | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 1 U | **1.6** | NA | 1 U | 0.5 U | NA | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | **0.51 J** | NA | **0.487 J** | 0.5 U | NA | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | **1.6** | NA | 1 U | 0.5 U | NA | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | NA | NA | 3 U | NA | 2 U | 1 U | NA | NA |
| Total BTEX | | TBTEX | NE | ND | ND | **3.71** | NA | **0.487** | ND | NA | ND |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | NA | NA | 5 U | 2 U | NA | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | NA | NA | 20 U | 10 U | NA | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | NA | NA | 20 U | 10 U | NA | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | 2 R | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 1 U | NA | 1 U | 0.5 U | NA | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | NA | NA | 1 U | 2 R | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | **2.4** | NA | 1 U | 0.5 U | NA | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | 1 U | 1 U | NA | NA | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | NA | NA | 1 U | **0.595** | NA | **0.59 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | NA | NA | 1 U | **12.8** | NA | **11** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | **0.26 J** |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | **0.31 J** | NA | NA | 1 U | **18.5** | NA | **17** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | **0.26 J** |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | NA | 1 U | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 1 U | NA | NA | 2 U | 0.5 U | NA | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | NA | NA | 1 U | 0.5 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 5 U | NA | NA | 2 U | 2 U | NA | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | **0.32 J** | NA | **0.432 J** | **0.618** | NA | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 5 U | NA | NA | **2.34** | 2 U | NA | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 1 U | NA | NA | 2 U | 1 U | NA | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | 5 U | NA | NA | NA | NA | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | 1 U | NA | NA | NA | NA | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 5 U | NA | NA | 1 U | 2 U | NA | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 1 U | 1 U | NA | 1 U | **3.64** | NA | **0.52 J** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U* | 1 U* | NA | NA | NA | NA | NA | 1 U* |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U* | 1 U* | NA | NA | 1 U | 0.5 U | NA | 1 U* |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Supplemental | Supplemental | Phase 1 | Phase 1 | Phase 1 | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-MW-103 | GPEC-MW-103 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D | GPEC-MW1D |
| | | | Sample Name | GPEC-MW-103 | DUP-01 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D FILT | GPEC-MW1D |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Deep | Deep | Deep |
| | | | Sample Date | 11/7/2024 | 11/7/2024 | 11/14/2011 | 12/5/2011 | 12/22/2012 | 3/24/2017 | 3/24/2017 | 11/7/2024 |
| | | | Parent Sample Code | | GPEC-MW103 | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 1 U | NA | 1 U | 0.5 U | NA | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 1 U | NA | NA | 1 U | **6.01** | NA | **1.7** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | NA | NA | 1 U | 0.5 U | NA | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | NA | NA | 1 U | 0.5 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | NA | NA | 1 U | 1 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | **1.4** | **1.5** | NA | NA | 1 U | 1 U | NA | **0.43 J** |
| Total VOCs | | TVOC | NE | **1.4** | **1.81** | **6.43** | NA | **3.259** | **42.163** | NA | **31.76** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **5.7 J** | **5.8 J** | NA | NA | 1 U | **1.22** | NA | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 10 U | NA | NA | 1 U | **0.308 J** | NA | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 10 U | NA | NA | 1 U | 1 UJ | NA | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 10 U | NA | NA | 1 U | **0.252 J** | NA | 10 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 10 U | NA | NA | 1 U | **0.543 J** | NA | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 10 U | NA | NA | 1 U | **0.34 J** | NA | 10 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 2 U | 11 U | NA | 1 U | **1.64** | NA | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 10 U | NA | NA | 1 U | **0.752 J** | NA | 10 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 10 U | NA | NA | 1 U | **0.352 J** | NA | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 1 U | NA | NA | 0.1 U | 1 U | NA | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 1 U | NA | NA | 0.1 U | 1 U | NA | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 2 U | NA | NA | 0.1 U | 1 U | NA | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 1 U | NA | NA | 0.1 U | 1 UJ | NA | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 2 U | NA | NA | 1 U | 1 U | NA | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 1 U | NA | NA | 0.1 U | 1 UJ | NA | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 2 U | NA | NA | 0.1 U | 1 UJ | NA | 2 U |
| Total PAHs | | TPAH | NE | **5.7** | **5.8** | ND | NA | ND | **5.407** | NA | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | 2 U | NA | NA | NA | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 2 U | NA | NA | 1 U | 1 U | NA | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Caprolactam | | 105-60-2 | NE | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | **2.4 J** | 10 U | NA | NA | 1 U | **0.391 J** | NA | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 20 U | NA | NA | 1 U | 1 U | NA | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 40 U | NA | NA | 1 U | 1 U | NA | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 2 U | NA | NA | 1 U | 1 U | NA | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | 1 U | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
| | | | Investigation Phase | Supplemental | Supplemental | Phase 1 | Phase 1 | Phase 1 | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-MW-103 | GPEC-MW-103 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D | GPEC-MW1D |
| | | | Sample Name | GPEC-MW-103 | DUP-01 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D FILT | GPEC-MW1D |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Deep | Deep | Deep |
| | | | Sample Date | 11/7/2024 | 11/7/2024 | 11/14/2011 | 12/5/2011 | 12/22/2012 | 3/24/2017 | 3/24/2017 | 11/7/2024 |
| | | | Parent Sample Code | | GPEC-MW103 | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 1 U | NA | NA | 0.02 U | 1 U | NA | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 2 U | NA | NA | 1 U | 1 U | NA | 2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 20 U | NA | NA | 1 U | 1 U | NA | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | NA | NA | 1 U | 1 U | NA | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | 1 U | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 20 U | NA | NA | 0.1 U | 1 U | NA | 20 U |
| Phenol | | 108-95-2 | 1 | 10 U | 10 U | NA | 500 U | 1 U | 1 U | NA | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 1.1 U | NA | NA | 1 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | 10 U | NA | NA | NA | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 10 U | NA | NA | 1 U | 1 U | NA | 10 U |
| Total SVOCs | | TSVOC | NE | **8.1** | **5.8** | ND | ND | ND | **5.798** | NA | ND |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 | Area 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental | Supplemental | Phase 1 | Phase 1 | Phase 1 | Supplemental Inv. | Supplemental Inv. | Supplemental |
| Location Name | | | | GPEC-MW-103 | GPEC-MW-103 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D | GPEC-MW1D |
| Sample Name | | | | GPEC-MW-103 | DUP-01 | GPEC-MW202 | GPEC-MW202 | GPEC-MW202 | GPEC-MW1D | GPEC-MW1D FILT | GPEC-MW1D |
| Screen Zone | | | | Intermediate | Intermediate | Shallow | Shallow | Shallow | Deep | Deep | Deep |
| Sample Date | | | | 11/7/2024 | 11/7/2024 | 11/14/2011 | 12/5/2011 | 12/22/2012 | 3/24/2017 | 3/24/2017 | 11/7/2024 |
| Parent Sample Code | | | | | GPEC-MW103 | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.4 U | NA | 0.59 U | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | 0.4 U | NA | NA | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | 0.4 U | NA | NA | 0.05 U | 0.05 UJ | NA | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | NA | ND | 0.05 U | 0.05 UJ | NA | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | 40 U | NA | NA | NA | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | 2 U | 2 U | NA | NA | NA | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | 2 U | 2 U | NA | NA | NA | NA | NA | **2.5** |
| Barium | | 7440-39-3 | 1000 | **59.8** | **67.8** | NA | NA | NA | NA | NA | **53.5** |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | 0.8 U | NA | NA | NA | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | 2 U | NA | NA | NA | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | **83900** | **93900** | NA | NA | NA | NA | NA | **82100** |
| Chromium | | 7440-47-3 | 50 | 4 U | 4 U | NA | NA | NA | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | **0.7 J** | **0.73 J** | NA | NA | NA | NA | NA | **1.1 J** |
| Copper | | 7440-50-8 | 200 | 4 U | 4 U | NA | NA | NA | NA | NA | 4 U |
| Iron | | 7439-89-6 | 300 | 120 U | 120 U | NA | NA | NA | NA | NA | 120 U |
| Lead | | 7439-92-1 | 25 | 1.2 U | 1.2 U | NA | NA | NA | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | **32900** | **57100** | NA | NA | NA | NA | NA | **31400** |
| Manganese | | 7439-96-5 | 300 | **2180** | **2070** | NA | NA | NA | NA | NA | **2750** |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | 0.2 U | NA | NA | NA | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | **10.5** | **9.7** | NA | NA | NA | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | **9660** | **19500** | NA | NA | NA | NA | NA | **5580** |
| Selenium | | 7782-49-2 | 10 | 2.5 U | 2.5 U | NA | NA | NA | NA | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | 2 U | 2 U | NA | NA | NA | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | **491000** | **705000** | NA | NA | NA | NA | NA | **231000** |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | 0.8 U | NA | NA | NA | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | 4 U | 4 U | NA | NA | NA | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | **13 J** | **10.3 J** | NA | NA | NA | NA | NA | **14.1 J** |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | NA | NA | **118** | **73.2** | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | NA | NA | 4 U | 2 U | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | NA | NA | **1.13 J** | **6.85** | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | NA | NA | **1050** | **75.9** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | NA | NA | 2 U | 2 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 5 U | NA | 2 U | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | NA | NA | **307000** | **95900** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | 10 U | NA | 8 U | 2 U | NA | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | 10 U | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | NA | NA | 8 U | **0.728 J** | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | 25 U | NA | 8 U | **5.8** | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | NA | NA | **2630** | **13900** | **8620** | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | **7.4** | NA | **1.17 J** | **3.57** | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | NA | NA | **54200** | **38200** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | NA | NA | **662** | **2840** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | 0.5 U | 0.5 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | 40 U | NA | **1.32 J** | **5.95** | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | NA | NA | **27000** | **6870** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | NA | NA | 8 U | 2 U | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | NA | NA | 2 U | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | NA | NA | **2210000** | **248000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | NA | NA | 2 U | 2 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | NA | NA | 8 U | **0.871 J** | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | **11.7 J** | NA | **13.3** | **1.93 J** | NA | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | NA | NA | NA | 2 U | 5 U | NA | NA |
| Total Cyanide | | 57-12-5 | 200 | NA | NA | NA | NA | 20 U | **11 J** | NA | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | 500 U | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | **43600** | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | 110 U | 110 U | NA | NA | NA | NA | NA | 110 U |
| C19-C36 Aliphatics | | EPH1936 | NE | **180** | **100 J** | NA | NA | NA | NA | NA | 110 U |
| C11-C22 Aromatics | | AROM11-22 | NE | 110 U | 110 U | NA | NA | NA | NA | NA | 110 U |
| C11-C22 Aromatics | | EPH1122 | NE | 110 U | 110 U | NA | NA | NA | NA | NA | 110 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW-2 | GPEC-MW-2 | GPEC-MW-2D | GPEC-MW-2D |
| | | | Sample Name | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW02S | GPEC-MW-2 | GPEC-MW02D | GPEC-MW-2D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Deep | Deep |
| | | | Sample Date | 3/24/2017 | 11/4/2024 | 3/28/2017 | 11/5/2024 | 12/19/2012 | 11/8/2024 | 12/18/2012 | 11/13/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 0.5 U | 1 U | 0.5 U | 1 U | **2.13** | **0.95 J** | **0.351 J** | 1 U |
| Toluene | | 108-88-3 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | **0.296 J** | **1** |
| Ethylbenzene | | 100-41-4 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | **11.8** | **1.3** | **6** | **12** |
| o-Xylene | | 95-47-6 | 5 | NA | 1 U | NA | 1 U | NA | **0.69 J** | NA | **4.6** |
| m/p-Xylene | | 179601-23-1 | 5 | NA | 1 U | NA | 1 U | NA | **0.47 J** | NA | **4.3** |
| Total Xylene | | 1330-20-7 | 5 | 1 U | NA | 1 U | NA | **5.42** | NA | **2.01** | NA |
| Total BTEX | | TBTEX | NE | ND | ND | ND | ND | **19.35** | **3.41** | **8.657** | **21.9** |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | NA | 20 U | NA | 20 U | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | 10 U | NA | 10 U | NA | 20 U | NA | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U* |
| Bromoform | | 75-25-2 | 50* | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U* |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | 2 U | NA | 2 U | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | **0.535 J** | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U* |
| Chlorobenzene | | 108-90-7 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | **0.42 J** | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | NA | 1 U | NA | 1 U | **NA** | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 0.5 U | 1 U | **1.26** | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U* |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 0.5 U | 1 U | **0.523** | **0.31 J** | **0.703 J** | **0.79 J** | **1.1** | **0.53 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 0.5 U | 1 U | **0.755** | **0.45 J** | 1 U | 1 U | **10.1** | **1.2** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 0.5 U | 1 U | 0.5 U | 1 U | **0.487 J** | **0.35 J** | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 0.5 U | **0.29 J** | **0.717** | **0.82 J** | 1 U | **0.46 J** | **3.74** | **0.59 J** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | NA | 1 U | NA | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 0.5 U | NA | 0.5 U | NA | 1 U | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | 1 U | NA | 1 U | NA | **1.3** | NA | **3** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | 5 U | NA | 5 U | NA | 5 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 2 U | 5 U | 2 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | **54.2** | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | 1 U | NA | 1 U | NA | 1 U* | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U* | 1 U | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 1** | **Area 1** | **Area 1** | **Area 1** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **Supplemental Inv.** | **Supplemental** | **Supplemental Inv.** | **Supplemental** | **Phase 1** | **Supplemental** | **Phase 1** | **Supplemental** |
| **Location Name** | | | | **GPEC-MW403** | **GPEC-MW403** | **GPEC-MW404** | **GPEC-MW404** | **GPEC-MW-2** | **GPEC-MW-2** | **GPEC-MW-2D** | **GPEC-MW-2D** |
| **Sample Name** | | | | **GPEC-MW403** | **GPEC-MW403** | **GPEC-MW404** | **GPEC-MW404** | **GPEC-MW02S** | **GPEC-MW-2** | **GPEC-MW02D** | **GPEC-MW-2D** |
| **Screen Zone** | | | | **Intermediate** | **Intermediate** | **Intermediate** | **Intermediate** | **Shallow** | **Shallow** | **Deep** | **Deep** |
| **Sample Date** | | | | **3/24/2017** | **11/4/2024** | **3/28/2017** | **11/5/2024** | **12/19/2012** | **11/8/2024** | **12/18/2012** | **11/13/2024** |
| **Parent Sample Code** | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 0.5 U | 1 U | **0.692** | 1 U | 1 U | 1 U | **10.9** | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 0.5 U | NA | 0.5 U | NA | 1 U | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | **0.27 J** | 1 U | **0.37 J** | 1 U | **1.5** |
| Total VOCs | | TVOC | NE | ND | **0.29** | **4.482** | **1.85** | **20.54** | **7.1** | **88.697** | **28.72** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **0.224 J** | 10 U | **0.89 J** | 10 U | **40.9** | **30** | **46.2** | **31** |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 10 U | **0.349 J** | 10 U | **0.862 J** | 10 U | **2.28** | **1 J** |
| Anthracene | | 120-12-7 | 50* | 1 U | 10 U | **0.675 J** | 10 U | **1.71** | 10 U | **1.14** | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 10 U | **0.58 J** | 10 U | **1.23** | 10 U | **2.27** | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 10 U | **0.649 J** | 10 U | **8.91** | **2.6 J** | **16** | **1.5 J** |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 10 U | **0.198 J** | 10 U | **31.3** | **14** | 1 U | **5.2 J** |
| Naphthalene | | 91-20-3 | 10* | 1 U | 2 U | **0.533 J** | 2 U | **101** | **36** | **1.41** | **81** |
| Phenanthrene | | 85-01-8 | 50* | **0.229 J** | 10 U | **0.857 J** | 10 U | **8.65** | **2.2 J** | **12** | **1.6 J** |
| Pyrene | | 129-00-0 | 50* | 1 U | 10 U | **1.15** | 10 U | **1.8** | 10 U | **3.58** | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 1 U | 1 U | 1 U | **0.13** | 1 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 1 U | 1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 1 U | 2 U | 1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 1 U | 1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 1 U | 1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 1 U | 2 U | 1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | **0.453** | ND | **5.881** | ND | **196.492** | **84.8** | **84.88** | **121.3** |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | 2 U | NA | 2 U | NA | 2 U* | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | 10 U | NA | 10 U | NA | **1.4 J** | NA | **1.7 J** |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 2 U | **0.463 J** | 2 U | 1 U | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 10 U | 1 U | 10 U | **2.09** | 10 U | **0.399 J** | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 10 U | 1 U | 10 U | **2.13** | 10 U | **4.09** | **2 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 1 U | NA | 1 U | NA | NA | NA | NA | **NA** |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 1 U | NA | 1 U | NA | NA | NA | NA | **NA** |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | 1 U | NA | NA | NA | NA | **NA** |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | 1 U | NA | 1 U | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 1 | Area 1 | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW-2 | GPEC-MW-2 | GPEC-MW-2D | GPEC-MW-2D |
| | | | Sample Name | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW02S | GPEC-MW-2 | GPEC-MW02D | GPEC-MW-2D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Deep | Deep |
| | | | Sample Date | 3/24/2017 | 11/4/2024 | 3/28/2017 | 11/5/2024 | 12/19/2012 | 11/8/2024 | 12/18/2012 | 11/13/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 1 U | 1 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 10 U* | 1 U | 10 U* | 1 U | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 1 U | 20 U | 1 U | 20 U | 0.1 U | 20 U | NA | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | **0.453** | ND | **6.344** | ND | **200.712** | **86.2** | **89.369** | **125** |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Area | | | | Area 1 | Area 1 | Area 1 | Area 1 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| Location Name | | | | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW-2 | GPEC-MW-2 | GPEC-MW-2D | GPEC-MW-2D |
| Sample Name | | | | GPEC-MW403 | GPEC-MW403 | GPEC-MW404 | GPEC-MW404 | GPEC-MW02S | GPEC-MW-2 | GPEC-MW02D | GPEC-MW-2D |
| Screen Zone | | | | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Deep | Deep |
| Sample Date | | | | 3/24/2017 | 11/4/2024 | 3/28/2017 | 11/5/2024 | 12/19/2012 | 11/8/2024 | 12/18/2012 | 11/13/2024 |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | 40 U | NA | 40 U | NA | 40 U | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | NA | **2.2** | NA | 2 U | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | **68.9** | NA | **108** | NA | **74.8** | NA | **36.7** |
| Beryllium | | 7440-41-7 | 3* | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **227000** | NA | **75200** | NA | **70100** | NA | **59700** |
| Chromium | | 7440-47-3 | 50 | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | 4 U | NA | 4 U | NA | 4 U | NA | **0.52 J** |
| Copper | | 7440-50-8 | 200 | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | 120 U | NA | 120 U | NA | 120 U | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **548000** | NA | **30400** | NA | **50900** | NA | **26500** |
| Manganese | | 7439-96-5 | 300 | NA | **872** | NA | **2050** | NA | **1350** | NA | **851** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | 4 U | NA | **1.9 J** | NA | 4 U | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | **176000** | NA | **13500** | NA | **19600** | NA | **7230** |
| Selenium | | 7782-49-2 | 10 | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **4790000** | NA | **170000** | NA | **402000** | NA | **119000** |
| Thallium | | 7440-28-0 | 0.5* | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | 16 U | NA | **7.6 J** | NA | 16 U | NA | **7.1 J** |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **78.6** | NA | **103** | NA | **48.2** | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 2 U | NA | 2 U | NA | 4 U | NA | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | **1.33 J** | NA | 2 U | NA | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **40** | NA | **107** | NA | **48.5** | NA | **29.3 J** | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **87300** | NA | **73300** | NA | **46000** | NA | **152000** | NA |
| Chromium | | 7440-47-3 | 50 | 2 U | NA | 2 U | NA | 8 U | NA | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | 2 U | NA | 2 U | NA | 8 U | NA | 8 U | NA |
| Copper | | 7440-50-8 | 200 | **2.34** | NA | **7.53** | NA | 8 U | NA | 8 U | NA |
| Iron | | 7439-89-6 | 300 | **3620** | NA | **4540** | NA | **1770** | NA | **3210** | NA |
| Lead | | 7439-92-1 | 25 | **3.87** | NA | **7.26** | NA | **0.9 J** | NA | 2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **32900** | NA | **33800** | NA | **22900** | NA | **74200** | NA |
| Manganese | | 7439-96-5 | 300 | **2090** | NA | **1490** | NA | **701** | NA | **2600** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | 2 U | NA | 2 U | NA | 4 U | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **9980** | NA | **13300** | NA | **11600** | NA | **11800** | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | NA | **5.16 J** | NA | 8 U | NA | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **140000** | NA | **130000** | NA | **161000** | NA | **163000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | **2.26** | NA | **2.32** | NA | 8 U | NA | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | **5.1** | NA | **11.9** | NA | **5.71 J** | NA | **29.9** | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 5 U | NA | 5 U | NA | 2 U | NA | 2 U | 5 U |
| Total Cyanide | | 57-12-5 | 200 | 20 U | NA | 20 U | NA | 20 U | NA | **26** | **129** |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | NA | NA | NA | 110 U | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | NA | 100 U | NA | 100 U | NA | 110 U | NA | **240** |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | NA | NA | NA | **120** | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | NA | NA | NA | **170** | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-3D | GPEC-MW-3D | GPEC-MW-3S | GPEC-MW-3S | GPEC-MW-3S | GPEC-MW-3WT | GPEC-MW-3WT | GPEC-MW-3WT | GPEC-MW-3WT |
| | | | Sample Name | GPEC-MW-3D | GPEC-MW03D | GPEC-MW-3S | GPEC-MW03S | GPEC-MW-3S | GPEC-MW-03WT | GPEC-MW03WT | GPEC-MW03WT | GPEC-MW-3WT |
| | | | Screen Zone | Deep | Deep | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 7/17/2009 | 12/19/2012 | 7/27/2009 | 12/19/2012 | 11/21/2024 | 8/31/2010 | 12/21/2012 | 11/15/2024 | |
| | | | Parent Sample Code | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **14 J** | **5.62** | **12** | 1 U | **0.3** | 5 U | 1 U | 1 U | |
| Toluene | | 108-88-3 | 5 | **81** | **21** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Ethylbenzene | | 100-41-4 | 5 | **430** | **177 D** | **37** | 1 U | 1 U | 5 U | 1 U | 1 U | |
| o-Xylene | | 95-47-6 | 5 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| Total Xylene | | 1330-20-7 | 5 | **360** | **77.7** | **21** | 2 U | NA | 5 U | 2 U | NA | |
| Total BTEX | | TBTEX | NE | **885** | **281.32** | **70** | ND | **0.3** | ND | ND | ND | |
| **Other VOCs** | µg/L | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 40 U | 2 U | 10 U | 2 U | 5 U | 10 UJ | 5 U | 5 U | |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | NA | 20 U | NA | NA | 20 U | NA | |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 20 U | NA | NA | 20 U | NA | |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | NA | NA | 1 U | NA | NA | 1 UJ | |
| Bromodichloromethane | | 75-27-4 | 50* | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Bromoform | | 75-25-2 | 50* | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Bromomethane | | 74-83-9 | 5 | 20 UJ | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | |
| Carbon disulfide | | 75-15-0 | 60* | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Carbon tetrachloride | | 56-23-5 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Chlorobenzene | | 108-90-7 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Chloroethane | | 75-00-3 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U | 1 U | |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA | |
| Chloroform | | 67-66-3 | 7 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Chloromethane | | 74-87-3 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Cyclohexane | | 110-82-7 | NE | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| Dibromochloromethane | | 124-48-1 | 50* | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 20 U | **1.28** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **8.9 J** | **7.18** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA | |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 2 U | 1 U | |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA | |
| 2-Hexanone | | 591-78-6 | 50* | 40 U | 1 U | 10 U | 1 U | 5 U | 10 U | 2 U | 5 U | |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 40 U | 1 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U | |
| Methylene chloride | | 75-09-2 | 5 | 20 U | 2 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | |
| Styrene | | 100-42-5 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Methyl acetate | | 79-20-9 | NE | NA | NA | NA | NA | 5 U | NA | NA | 5 U | |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | NA | NA | 1 U | NA | NA | 1 U | |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 40 U | 1 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| Tetrachloroethene | | 127-18-4 | 5 | **16 J** | **26.7** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | NA | NA | 1 U | NA | NA | 1 UJ | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 UJ | |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **Phase 1** | **PDI** | **Phase 1** | **Supplemental** | **PDI** | **Phase 1** | **Supplemental** |
| **Location Name** | | | | **GPEC-MW-3D** | **GPEC-MW-3D** | **GPEC-MW-3S** | **GPEC-MW-3S** | **GPEC-MW-3S** | **GPEC-MW-3WT** | **GPEC-MW-3WT** | **GPEC-MW-3WT** |
| **Sample Name** | | | | **GPEC-MW-3D** | **GPEC-MW03D** | **GPEC-MW-3S** | **GPEC-MW03S** | **GPEC-MW-3S** | **GPEC-MW-03WT** | **GPEC-MW03WT** | **GPEC-MW-3WT** |
| **Screen Zone** | | | | **Deep** | **Deep** | **Intermediate** | **Intermediate** | **Intermediate** | **Shallow** | **Shallow** | **Shallow** |
| **Sample Date** | | | | **7/17/2009** | **12/19/2012** | **7/27/2009** | **12/19/2012** | **11/21/2024** | **8/31/2010** | **12/21/2012** | **11/15/2024** |
| **Parent Sample Code** | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 20 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **5 J** | **9.47** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 20 U | **2.61** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **914.9** | **328.56** | **70** | ND | **0.3** | ND | ND | ND |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **98 J** | **57.9** | **35** | **1.3** | **2.2** | 4.3 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | **240** | **37.7** | **3.4 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | **34 J** | **7.7** | **6.5 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 210 U | **0.417 J** | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | **22 J** | **4.33** | **5 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | **79 J** | **14.4** | **12 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | **140 J** | **0.38 J** | **56** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | **2900** | **53.5** | **190** | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | **150 J** | **48.3** | **24** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | **40 J** | **6.5** | **4.3 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | **18 J** | **0.914** | **2.1 J** | **0.127** | 1 U | 4.3 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 210 U | **0.624** | **1.7 J** | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 210 U | **0.313** | 16 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 210 U | **0.249** | 16 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | **15 J** | **1.06** | **1.9 J** | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 210 U | 0.1 U | 16 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 210 U | **0.223** | 16 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | **3736** | **234.51** | **341.9** | **1.427** | **2.2** | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | NA | NA | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | NA | NA | 2 U | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | NA | NA | 10 U | NA | NA | 10 UJ |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 210 U | NA | 16 U | NA | NA | 4.3 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | NA | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 210 U | 1 U | 16 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 210 U | 1 U | 16 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | NA | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 210 U | **2.16** | **3 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 260 U | 1 U | 20 U | 1 U | 10 U | 5.4 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 210 U | **7.84** | **3.2 J** | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 210 U | NA | 16 U | NA | NA | 4.3 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 210 U | NA | 16 U | NA | NA | 4.3 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 210 U | NA | 16 U | NA | NA | 4.3 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1300 U | 1 U | 100 U | 1 U | 20 U | 27 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1300 U | 1 U | 100 U | 1 U | 40 U | 27 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 210 U | 1 U | 16 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-3D | GPEC-MW-3D | GPEC-MW-3S | GPEC-MW-3S | GPEC-MW-3S | GPEC-MW-3WT | GPEC-MW-3WT | GPEC-MW-3WT |
| | | | Sample Name | GPEC-MW-3D | GPEC-MW03D | GPEC-MW-3S | GPEC-MW03S | GPEC-MW-3S | GPEC-MW-03WT | GPEC-MW03WT | GPEC-MW-3WT |
| | | | Screen Zone | Deep | Deep | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow |
| | | | Sample Date | 7/17/2009 | 12/19/2012 | 7/27/2009 | 12/19/2012 | 11/21/2024 | 8/31/2010 | 12/21/2012 | 11/15/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 210 U | 0.02 U | 16 U | 0.02 U | 1 U | 4.3 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 210 U | 1 U | 16 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U* | 4.3 UJ | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 210 U | 1 U | 16 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 210 U | 1 U | 16 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 520 U | 1 U | 40 U | 1 U | 20 U | 11 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 210 U | 1 U | 16 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 1300 U | 0.1 U | 100 U | 0.1 U | 20 U | 27 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 210 U | NA | 16 U | NA | NA | 4.3 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | NA | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | NA | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 520 U | 1 U | 40 U | 1 U | 10 U | 11 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 210 U | 1 U | 16 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | **3736** | **244.51** | **348.1** | **1.427** | **2.2** | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | 37.1 U | NA | NA | 37.4 U |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | 37.1 U | NA | NA | 37.4 U |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | 7.43 U* | NA | NA | 7.49 U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | 1.49 U* | NA | NA | 1.5 U |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | 14.9 U* | NA | NA | 15 U |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | 1.49 U* | NA | NA | 1.5 U |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | 14.9 U | NA | NA | 15 U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | 2.97 U | NA | NA | 2.99 U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | 2.97 U | NA | NA | 2.99 U |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | 2.97 U | NA | NA | 2.99 U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | 2.97 U | NA | NA | 2.99 U |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | **3.79** | NA | NA | **2.58** |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | **6.31** | NA | NA | **6.44** |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | **1.67** | NA | NA | 1.5 U |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | **2.02** | NA | NA | **2.17** |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | **1.72** | NA | NA | **2.72** |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | **2.62 J** | NA | NA | **3.04** |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | 1.49 U | NA | NA | 1.5 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | 5.94 U | NA | NA | 5.99 U |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | **0.7 J** | NA | NA | **1.19 J** |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | **3.6** | NA | NA | **1.58** |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | **10.1** | NA | NA | **4.63** |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | **19.8** | NA | NA | **8.26** |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 2 PDI GPEC-MW-3D Deep 7/17/2009 | Area 2 Phase 1 GPEC-MW-3D GPEC-MW03D Deep 12/19/2012 | Area 2 PDI GPEC-MW-3S Intermediate 7/27/2009 | Area 2 Phase 1 GPEC-MW-3S GPEC-MW03S Intermediate 12/19/2012 | Area 2 Supplemental GPEC-MW-3S GPEC-MW-3S Intermediate 11/21/2024 | Area 2 PDI GPEC-MW-3WT GPEC-MW-03WT Shallow 8/31/2010 | Area 2 Phase 1 GPEC-MW-3WT GPEC-MW03WT Shallow 12/21/2012 | Area 2 Supplemental GPEC-MW-3WT GPEC-MW-3WT Shallow 11/15/2024 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.53 UJ | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 U | ND | 0.05 U | ND | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | NA | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | NA | NA | NA | 2 U | NA | NA | **0.95 J** |
| Arsenic | | 7440-38-2 | 25 | NA | NA | NA | NA | **8.9** | NA | NA | **1.6 J** |
| Barium | | 7440-39-3 | 1000 | NA | NA | NA | NA | **256** | NA | NA | **727** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | NA | NA | 2 U | NA | NA | **1 J** |
| Calcium | | 7440-70-2 | NE | NA | NA | NA | NA | **65000** | NA | NA | **325000** |
| Chromium | | 7440-47-3 | 50 | NA | NA | NA | NA | 4 U | NA | NA | **2.5 J** |
| Cobalt | | 7440-48-4 | NE | NA | NA | NA | NA | 4 U | NA | NA | 4 U |
| Copper | | 7440-50-8 | 200 | NA | NA | NA | NA | 4 U | NA | NA | **2.6 J** |
| Iron | | 7439-89-6 | 300 | NA | NA | NA | NA | 120 U | NA | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | NA | NA | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | NA | NA | **29600** | NA | NA | **389000** |
| Manganese | | 7439-96-5 | 300 | NA | NA | NA | NA | **478** | NA | NA | **4.2 J** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | NA | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | NA | NA | 4 U | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | NA | NA | NA | **10200** | NA | NA | **111000** |
| Selenium | | 7782-49-2 | 10 | NA | NA | NA | NA | 2.5 U | NA | NA | **0.55 J** |
| Silver | | 7440-22-4 | 50 | NA | NA | NA | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | NA | NA | **181000** | NA | NA | **3320000** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | NA | NA | 4 U | NA | NA | **1.1 J** |
| Zinc | | 7440-66-6 | 2000* | NA | NA | NA | NA | 16 U | NA | NA | **7.6 J** |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **163 J** | **533** | **1130** | **322** | NA | 250 U | **651** | NA |
| Antimony | | 7440-36-0 | 3 | 15 U | 8 U | 15 U | 4 U | NA | 15 U | **1.72** | NA |
| Arsenic | | 7440-38-2 | 25 | **14.2 J** | 4 U | **22.1** | **18.9** | NA | 15 U | **2.89** | NA |
| Barium | | 7440-39-3 | 1000 | **129** | **54.9 J** | **187** | **109** | NA | **353** | **30.9** | NA |
| Beryllium | | 7440-41-7 | 3* | 5 U | 4 U | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 5 U | 4 U | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **113000** | **113000** | **44300** | **28300** | NA | **158000** | **24200** | NA |
| Chromium | | 7440-47-3 | 50 | **0.7 J** | 16 U | **5** | 8 U | NA | 5 U | **6.26** | NA |
| Chromium (VI) | | 18540-29-9 | NE | 10 U | NA | 10 U | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | 5 U | 16 U | **0.74 J** | 8 U | NA | 5 U | 8 U | NA |
| Copper | | 7440-50-8 | 200 | 10 U | 16 U | **58.9** | 8 U | NA | **7 J** | **37** | NA |
| Iron | | 7439-89-6 | 300 | **4100** | **7840** | **2520** | **1640** | NA | **80.8 J** | **848** | NA |
| Lead | | 7439-92-1 | 25 | 15 U | **3.21 J** | **22.9** | **5.9** | NA | 15 U | **28.6** | NA |
| Magnesium | | 7439-95-4 | 35000* | **92600** | **117000** | **45800** | **12800** | NA | **113000** | **10600** | NA |
| Manganese | | 7439-96-5 | 300 | **1510** | **572** | **319** | **238** | NA | **396** | **40.5** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | 0.5 U | **0.07 J** | 0.5 U | NA | 0.4 U | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **1.8 J** | **4.07 J** | **10.2** | **2.76 J** | NA | 5 U | **4.54** | NA |
| Potassium | | 7440-09-7 | NE | **43400** | **29500** | **32200** | **6790** | NA | **42500** | **8600** | NA |
| Selenium | | 7782-49-2 | 10 | 38 UJ | 16 U | 38 U | 8 U | NA | 38 U | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 5 U | 4 U | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **522000** | **679000** | **425000** | **123000** | NA | **1010000** | **147000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 15 U | 4 U | 15 U | 2 U | NA | 15 U | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | 5 U | 16 U | **3 J** | 8 U | NA | **4.3 J** | **6.91** | NA |
| Zinc | | 7440-66-6 | 2000* | 25 U | **16.4** | **45.3** | **16.6** | NA | **7.9 J** | **72.8** | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | **2 J** | 2 U | 10 U | 2 U | NA | 10 U | 2 U | NA |
| Total Cyanide | | 57-12-5 | 200 | **59.9** | 20 U | 10 U | 20 U | NA | **3.1 J** | 20 U | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | NA | NA | NA | NA | 110 U | NA | NA | 110 U |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW-5D | GPEC-MW-5D |
| | | | Sample Name | GPEC-MW-4 | GPEC-MW04 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW05D | GPEC-MW-5D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep |
| | | | Sample Date | 7/23/2009 | 12/18/2012 | 1/14/2025 | 3/20/2017 | 1/14/2025 | 7/22/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 5 U | 1 U | 1 U | **0.995** | **0.36 J** | **14** | **4.4** | **1.7** |
| Toluene | | 108-88-3 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | **11** | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | **1.9 J** | **1.14** | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | 1 U | NA | 1 U | NA | NA | **0.33 J** |
| Total Xylene | | 1330-20-7 | 5 | 5 U | 2 U | NA | 1 U | NA | **11** | **1.7** | NA |
| Total BTEX | | TBTEX | NE | ND | ND | ND | **0.995** | NA | **37.9** | **7.24** | **2.03** |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 10 UJ | 2 U | 5 U | 2 U | 5 U | 10 U | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | NA | 20 U | NA | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 10 U | NA | NA | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 5 UJ | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | 2 U | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 5 UJ | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | **3.4 J** | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U* | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 5 U | 1 U | 1 U | **4.29** | **0.73 J** | 5 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 5 U | 1 U | 1 U | **0.618** | 1 U | 5 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 5 U | 1 U | 1 U | **0.996** | **0.46 J** | 5 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 5 U | 1 U | **0.28 J** | **32.7** | **12** | **1.5 J** | 1 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 5 U | 1 U | 1 U | **1.22** | **0.68 J** | 5 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 2 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 0.5 U | NA | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 10 U | 1 U | 5 U | 1 U | 5 U | 10 U | 2 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | 1 U | NA | NA | **1** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 1 U | 0.5 U | 1 U | NA | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 10 U | 1 U | 5 U | 1 U | 5 U | 10 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 5 U | 2 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 5 U | 1 U | 1 U | 1 U | 1 U | **1.7 J** | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | 5 U | NA | 5 U | **NA** | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | 1 U | NA | 1 U | **NA** | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 10 U | 1 U | 5 U | 2 U | 5 U | 10 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 5 U | 1 U | 1 U | **136** | **43** | 5 U | 1 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U* | NA | 1 U | NA | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW-5D | GPEC-MW-5D |
| | | | Sample Name | GPEC-MW-4 | GPEC-MW04 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW05D | GPEC-MW-5D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep |
| | | | Sample Date | 7/23/2009 | 12/18/2012 | 1/14/2025 | 3/20/2017 | 1/14/2025 | 7/22/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 5 U | 1 U | 1 U | 0.5 U | 1 U | 5 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 5 U | 1 U | 1 U | **51.7** | **29** | 5 U | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 0.5 U | NA | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 5 U | 1 U | 1 U | **10.2** | **1.4** | 5 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **3.4** | ND | **0.28** | **238.719** | **NA** | **41.1** | **7.24** | **3.03** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **3.3 J** | 1 U | 10 U | 1 U | 10 U | **7.1** | **0.41** | **14** |
| Acenaphthylene | | 208-96-8 | NE | **0.44 J** | 1 U | 10 U | 1 U | 10 U | **2 J** | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | **0.42 J** | 1 U | 10 U | 1 U | 10 U | **1.8 J** | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | **1.1 J** | 1 U | **1.4 J** |
| Fluorene | | 86-73-7 | 50* | **1.4 J** | 1 U | 10 U | 1 U | 10 U | **6.4** | **0.346** | **6.7 J** |
| 2-Methylnaphthalene | | 91-57-6 | NE | **5.2** | 1 U | 10 U | 1 U | 10 U | **15** | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | **11** | 1 U | 2 U | 1 U | 2 U | **81** | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | **2.8 J** | 1 U | 10 U | 1 U | 10 U | **10** | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | **0.38 J** | 1 U | 10 U | 1 U | 10 U | **1 J** | 1 U | **2.4 J** |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 4.3 U | 0.1 U | 2 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 4.3 U | 0.1 U | 2 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | **24.94** | ND | ND | ND | ND | **125.4** | **0.756** | **24.5** |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | 1 U | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | 10 U | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | 1 U | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 4.3 U | NA | NA | 1 U | NA | 4.3 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | **3.3 J** | **0.747** | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 5.3 U | 1 U | 10 U | 1 U | 10 U | 5.3 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | **2 J** | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 4.3 U | NA | NA | 1 U | NA | 4.3 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 4.3 U | NA | NA | 1 U | NA | 4.3 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 4.3 U | NA | NA | 1 U | NA | 4.3 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | **0.395** | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | **2.7 J** | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 27 U | 1 U | 20 U | 10 U | 20 U | 27 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 27 U | 1 U | 40 U | 1 U | 40 U | 27 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4.3 U | 1 U | 10 U | 10 U | 10 U | 4.3 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | 1 U | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **Phase 1** | **Supplemental** | **Supplemental Inv.** | **Supplemental** | **PDI** | **Phase 1** | **Supplemental** |
| **Location Name** | | | | **GPEC-MW-4** | **GPEC-MW-4** | **GPEC-MW-4** | **GPEC-MW4D** | **GPEC-MW-4D** | **GPEC-MW-5D** | **GPEC-MW-5D** | **GPEC-MW-5D** |
| **Sample Name** | | | | **GPEC-MW-4** | **GPEC-MW04** | **GPEC-MW-4** | **GPEC-MW4D** | **GPEC-MW-4D** | **GPEC-MW-5D** | **GPEC-MW05D** | **GPEC-MW-5D** |
| **Screen Zone** | | | | **Intermediate** | **Intermediate** | **Intermediate** | **Deep** | **Deep** | **Deep** | **Deep** | **Deep** |
| **Sample Date** | | | | **7/23/2009** | **12/18/2012** | **1/14/2025** | **3/20/2017** | **1/14/2025** | **7/22/2009** | **12/20/2012** | **11/18/2024** |
| **Parent Sample Code** | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 4.3 U | 0.02 U | 1 U | 0.02 U | 1 U | 4.3 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 4.3 U | 1 U | 10 U* | 1 U | 10 U* | 4.3 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4.3 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 4.3 U | 1 U | 10 U | 1 U | 10 U | **0.72 J** | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 4.3 U | 1 U | 10 U | 1 U | 10 U | **0.66 J** | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 11 U | 1 U | 20 U | 1 U | 20 U | 11 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4.3 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | 1 U | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 27 U | 0.1 U | 20 U | 0.1 U | 20 U | 27 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | **0.64 J** | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | 1 U | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 4.3 U | NA | NA | 1 U | NA | 4.3 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 11 U | 1 U | 10 U | 1 U | 10 U | 11 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4.3 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | **25.58** | ND | ND | ND | ND | **134.78** | **1.898** | **24.5** |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | 152 U* |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | 152 U |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | 30.5 U* |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | 61 U* |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | 61 U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | 12.2 U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | 12.2 U |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | 12.2 U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | 12.2 U |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | **2.18 J** |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | **9.19 J** |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | **5.44 J** |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | **8.77** |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | **7.39 J** |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | 6.1 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | 24.4 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | **107** |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | **1.9 J** |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | **3.02 J** |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | **7.17** |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | **30.6** |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Area | | | | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | PDI | Phase 1 | Supplemental |
| Location Name | | | | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW-5D | GPEC-MW-5D |
| Sample Name | | | | GPEC-MW-4 | GPEC-MW04 | GPEC-MW-4 | GPEC-MW4D | GPEC-MW-4D | GPEC-MW-5D | GPEC-MW05D | GPEC-MW-5D |
| Screen Zone | | | | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep |
| Sample Date | | | | 7/23/2009 | 12/18/2012 | 1/14/2025 | 3/20/2017 | 1/14/2025 | 7/22/2009 | 12/20/2012 | 11/18/2024 |
| Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.53 U | 0.05 U | 0.4 U* | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.53 U | 0.05 U | 0.4 U* | 0.05 U | 0.4 U | 0.52 UJ | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 U | ND | 0.05 U | | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | 40 U | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | NA | 2 U | NA | **2.2** | NA | NA | **9.1** |
| Barium | | 7440-39-3 | 1000 | NA | NA | **107** | NA | **51.8** | NA | NA | **327** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.8 U | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | NA | **43700** | NA | **152000** | NA | NA | **77200** |
| Chromium | | 7440-47-3 | 50 | NA | NA | 4 U | NA | 4 U | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | NA | 4 U | NA | **2.2 J** | NA | NA | **4.1** |
| Copper | | 7440-50-8 | 200 | NA | NA | 4 U | NA | 4 U | NA | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | NA | 120 U | NA | 120 U | NA | NA | **104 J** |
| Lead | | 7439-92-1 | 25 | NA | NA | 1.2 U | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **15400** | NA | **64700** | NA | NA | **24500** |
| Manganese | | 7439-96-5 | 300 | NA | NA | **169** | NA | **1670** | NA | NA | **524 B** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | 4 U | NA | **1.6 J** | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | NA | **8730 B** | NA | **15200 B** | NA | NA | **10900** |
| Selenium | | 7782-49-2 | 10 | NA | NA | 2.5 U | NA | 2.5 U | NA | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **154000** | NA | **567000** | NA | NA | **220000** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.8 U | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | 4 U | NA | 4 U | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | NA | **4.8 J** | NA | 16 U | NA | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **4050** | **308** | NA | **762** | NA | **699** | **41.7** | NA |
| Antimony | | 7440-36-0 | 3 | 15 U | 4 U | NA | 2 U | NA | 15 U | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | **8.7 J** | **2.24** | NA | **5.66** | NA | **397** | **156** | NA |
| Barium | | 7440-39-3 | 1000 | **63.2** | **89.8** | NA | **90.2** | NA | **66.5** | **172** | NA |
| Beryllium | | 7440-41-7 | 3* | **0.29 J** | 2 U | NA | 2 U | NA | 5 U | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 5 U | 2 U | NA | 2 U | NA | 5 U | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **27700** | **57800** | NA | **161000** | NA | **106000** | **75500** | NA |
| Chromium | | 7440-47-3 | 50 | **10.3** | 8 U | NA | **4.59** | NA | **1.9 J** | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | 10 U | NA | NA | NA | NA | 10 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | **2.4 J** | 8 U | NA | **3.01** | NA | **2.5 J** | **2.38** | NA |
| Copper | | 7440-50-8 | 200 | **15.2** | **6.26 J** | NA | **6.31** | NA | 10 U | 8 U | NA |
| Iron | | 7439-89-6 | 300 | **6140** | **664** | NA | **15500** | NA | **6340** | **9310** | NA |
| Lead | | 7439-92-1 | 25 | **5.8** | **8.09** | NA | **4.93** | NA | 15 U | **0.729** | NA |
| Magnesium | | 7439-95-4 | 35000* | **4560** | **36800** | NA | **97400** | NA | **34900** | **19800** | NA |
| Manganese | | 7439-96-5 | 300 | **147** | **46.7** | NA | **1790** | NA | **721** | **814** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | 0.5 U | NA | 0.5 U | NA | 0.2 U | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **8.3** | **1.41 J** | NA | **8.23** | NA | **4.3 J** | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **10800** | **23100** | NA | **16800** | NA | **19600** | **8760** | NA |
| Selenium | | 7782-49-2 | 10 | 38 U | 8 U | NA | **3.27** | NA | 38 U | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 5 U | 2 U | NA | 2 U | NA | 5 U | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **137000** | **598000** | NA | **222000** | NA | **192000** | **136000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 15 U | 2 U | NA | 2 U | NA | 15 U | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | **50** | **4.24 J** | NA | **9.23** | NA | **4.7 J** | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | **26.6** | **20.2** | NA | **11.9** | NA | **13 J** | 8 U | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 10 U | 2 U | NA | 5 U | NA | **2 J** | 2 U | NA |
| Total Cyanide | | 57-12-5 | 200 | 10 U | 20 U | NA | 20 U | NA | **288** | 20 U | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | 110 U | NA | 100 U | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | NA | NA | 110 U | NA | 100 U | NA | NA | 120 U |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | 110 U | NA | 100 U | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | 110 U | NA | 100 U | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental |
| | | | Location Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW-5S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D |
| | | | Sample Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW05S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | DUP-03 |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 11/25/2024 | 7/22/2009 | 12/20/2012 | 11/18/2024 | 7/20/2009 | 12/19/2012 | 11/18/2024 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | GPE-MW-2D |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **0.75 J** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| Total Xylene | | 1330-20-7 | 5 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA |
| Total BTEX | | TBTEX | NE | NA | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 U | 2 U | 5 U | 10 U | **174** | **11** | **12** |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | 20 U | NA | NA | 20 U | **NA** | **NA** |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | 20 U | NA | NA | 20 U | **NA** | **NA** |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 UJ | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | **1.9** | **1.9** |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 UJ | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | **0.39 J** | NA | NA | 1 U | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U* | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | 1 U | 1 U | NA | **1.23** | **0.35 J** | **0.36 J** |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U* | 10 U | **2.8** | 5 U | 10 U | 1 U | 5 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | 5 U | NA | NA | 5 U | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental |
| | | | Location Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW-5S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D |
| | | | Sample Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW05S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | DUP-03 |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 11/25/2024 | 7/22/2009 | 12/20/2012 | 11/18/2024 | 7/20/2009 | 12/19/2012 | 11/18/2024 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | GPE-MW-2D |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | **0.56 J** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | NA | ND | **2.8** | **0.39** | ND | **175.23** | **13.25** | **14.26** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | **2.1 J** | **0.628 J** | 10 U | 4 U | 1 U | 10 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 10 U | **0.79 J** | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | **0.82 J** | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 10 U | **1.5 J** | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | **2.2 J** | 1 U | **0.72 J** | 4 U | 1 U | 10 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | **4 J** | 1 U | 2 U | 4 U | **7.89** | 2 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | **3.9 J** | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 10 U | **0.97 J** | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 4.4 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 4.4 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 4.4 U | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 4.4 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 4.4 U | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 4.4 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 4.4 U | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 2 U |
| Total PAHs | | TPAH | NE | | **16.28** | **0.628** | **0.72** | ND | **7.89** | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4.4 U | NA | NA | 4 U | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4.4 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | **0.65 J** | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Caprolactam | | 105-60-2 | NE | **43** | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| Carbazole | | 86-74-8 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 5.6 U | 1 U | 10 U | 5 U | 1 U | 10 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 4.4 U | NA | NA | 4 U | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4.4 U | NA | NA | 4 U | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 4.4 U | NA | NA | 4 U | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 4.4 U | **0.405 J** | 10 U | 4 U | 1 U | 10 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 28 U | 1 U | 20 U | 25 U | 1 U | 20 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 28 U | 1 U | 40 U | 25 U | 1 U | 40 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 4.4 U | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental |
| | | | Location Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW-5S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D |
| | | | Sample Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW05S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | DUP-03 |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 11/25/2024 | 7/22/2009 | 12/20/2012 | 11/18/2024 | 7/20/2009 | 12/19/2012 | 11/18/2024 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | GPE-MW-2D |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 4.4 U | 0.02 U | 1 U | 4 U | 0.02 U | 1 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4.4 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 4.4 U | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4.4 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 11 U | 1 U | 20 U | 10 U | 1 U | 20 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4.4 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 28 U | 0.1 U | 20 U | 25 U | 0.1 U | 20 U | 20 U |
| Phenol | | 108-95-2 | 1 | **1.5 J** | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4.4 U | NA | NA | 4 U | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 11 U | 1 U | 10 U | 10 U | 1 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 4.4 U | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U |
| Total SVOCs | | TSVOC | NE | **44.5** | **16.93** | **1.033** | **0.72** | ND | **7.89** | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | 42.2 U | NA | NA | 41.4 U* | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | 42.2 U | NA | NA | 41.4 U | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | 8.45 U | NA | NA | 8.28 U* | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | 16.9 U | NA | NA | 16.6 U* | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | **1.25 J** | NA | NA | 1.66 U | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | 16.9 U | NA | NA | 16.6 U | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | **2.62** | NA | NA | 1.66 U | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | 3.38 U | NA | NA | 3.31 U | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | 3.38 U | NA | NA | 3.31 U | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | 3.38 U | NA | NA | 3.31 U | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | 3.38 U | NA | NA | 3.31 U | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | 1.69 U | NA | NA | **1.24 J** | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | **14.3** | NA | NA | **5.93 J** | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | **2.47** | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | **6.8** | NA | NA | **4.55** | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | **27.3** | NA | NA | **5.37** | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | **0.48 J** | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | **59.5** | NA | NA | **4.89** | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | 1.69 U | NA | NA | 1.66 U | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | **0.55 J** | NA | NA | 1.66 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | 6.76 U | NA | NA | 6.63 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | **80.6** | NA | NA | **1.85 J** | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | 1.69 U | NA | NA | **1.26 J** | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | **1.92** | NA | NA | **2.08** | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | **2** | NA | NA | **3.39** | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | **5.16** | NA | NA | **28.7** | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental |
| | | | Location Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW-5S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D |
| | | | Sample Name | GPEC-MW5D2 | GPEC-MW-5S | GPEC-MW05S | GPEC-MW-5S | GPE-MW-2D | GPE-MW-2D | GPE-MW-2D | DUP-03 |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 11/25/2024 | 7/22/2009 | 12/20/2012 | 11/18/2024 | 7/20/2009 | 12/19/2012 | 11/18/2024 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | GPE-MW-2D |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.52 U | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | | ND | 0.05 U | ND | ND | 0.05 U | ND | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | 40 U | NA | NA | 40 U | 40 U |
| Antimony | | 7440-36-0 | 3 | **2.5** | NA | NA | 2 U | NA | NA | 2 U | 2 U |
| Arsenic | | 7440-38-2 | 25 | **1.4 J** | NA | NA | **34.8** | NA | NA | **120** | **134** |
| Barium | | 7440-39-3 | 1000 | **94.1** | NA | NA | **216** | NA | NA | **250** | **255** |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U |
| Calcium | | 7440-70-2 | NE | **82600** | NA | NA | **49900** | NA | NA | **119000** | **117000** |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | 4 U | NA | NA | 4 U | 4 U |
| Cobalt | | 7440-48-4 | NE | 4 U | NA | NA | **7** | NA | NA | **1 J** | **1 J** |
| Copper | | 7440-50-8 | 200 | 4 U | NA | NA | 4 U | NA | NA | **2.8 J** | **2.4 J** |
| Iron | | 7439-89-6 | 300 | 120 U | NA | NA | **133** | NA | NA | **52.9 J** | **54.4 J** |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | **21500** | NA | NA | **87600** | NA | NA | **26000** | **23200** |
| Manganese | | 7439-96-5 | 300 | **90.1** | NA | NA | **134 B** | NA | NA | **647 B** | **657 B** |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | 0.2 U | NA | NA | **0.1 J** | 0.2 U |
| Nickel | | 7440-02-0 | 100 | **1.4 J** | NA | NA | 4 U | NA | NA | 4 U | 4 U |
| Potassium | | 7440-09-7 | NE | **9060** | NA | NA | **39100** | NA | NA | **105000** | **105000** |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | **1.2 J** | NA | NA | 2.5 U | 2.5 U |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **276000** | NA | NA | **524000** | NA | NA | **142000** | **120000** |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | **3.1 J** | NA | NA | 4 U | 4 U |
| Zinc | | 7440-66-6 | 2000* | 16 U | NA | NA | 16 U | NA | NA | 16 U | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **669** | **34.4 J** | NA | 250 U | **114** | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | 15 U | 4 U | NA | 15 U | 4 U | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | **33.6** | **13.1** | NA | **290** | **312** | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | **220** | **168** | NA | **528** | **576** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | **57800** | **58500** | NA | **179000** | **140000** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | **2.9 J** | 8 U | NA | 5 U | 8 U | NA | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | **7** | **7.13 J** | NA | **1.1 J** | 8 U | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | **20.5** | 8 U | NA | 10 U | **4.12 J** | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | **6480** | **3840** | NA | **15500** | **21200** | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | 15 U | **2.4** | NA | 15 U | **2.64** | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | **61900** | **75200** | NA | **27700** | **24700** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | **168** | **183** | NA | **1530** | **1600** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | 0.5 U | NA | 0.2 U | 0.5 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | **3.1 J** | **1.89 J** | NA | **2 J** | **3.3 J** | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | **30500** | **35700** | NA | **101000** | **101000** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | 38 U | 8 U | NA | 38 UJ | 8 U | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | **389000** | **457000** | NA | **106000** | **127000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | 15 U | 2 U | NA | 15 U | 2 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | **7.8 J** | 8 U | NA | 5 U | 8 U | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | **21.2** | **7.5 J** | NA | 25 U | **9.79** | NA | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | **2 J** | 2 U | NA | **2 J** | 2 U | NA | NA |
| Total Cyanide | | 57-12-5 | 200 | NA | **3.8 J** | **121** | NA | **117** | **21** | NA | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | 120 U | NA | NA | 120 U | NA | NA | 110 U | 110 U |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | PDI | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPE-MW2D2 | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| | | | Sample Name | GPE-MW2D2 | GPE-MW-2S | GPEC-MW-XX-072009 | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| | | | Screen Zone | Deep | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow |
| | | | Sample Date | 11/25/2024 | 7/20/2009 | 7/20/2009 | 12/19/2012 | 12/4/2024 | 12/19/2012 | 11/18/2024 | 7/20/2009 |
| | | | Parent Sample Code | | | GPE-MW-2S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **1.5** | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Toluene | | 108-88-3 | 5 | **13** | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| Total Xylene | | 1330-20-7 | 5 | NA | 5 U | 5 U | 2 U | NA | 2 U | NA | 5 U |
| Total BTEX | | TBTEX | NE | **14.5** | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 U | 10 UJ | **22.8** | 5 U | **94.3** | **13** | 10 UJ |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | NA | 20 U | NA | 20 U | **NA** | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | NA | 20 U | NA | 20 U | **NA** | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 U | 5 UJ | 1 U | 1 U | 1 U | 1 U | 5 UJ |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 U | 5 UJ | 1 U | 1 U | 1 U | 1 U | 5 UJ |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | NA | 1 U | NA | **0.54 J** | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | NA | 1 U | 1 U | 1 U | 1 U | NA |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U* | 10 U | 10 U | 1 U | 5 U | 1 U | 5 U | 10 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | NA | 1 U | 1 U | **1.15** | **0.64 J** | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U* | 10 U | 10 U | 1 U | 5 U | 1 U | 5 U | 10 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 5 U | 5 U | 2 U | 1 U | 2 U | 1 U | 5 U |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | NA | 5 U | NA | 5 U | NA |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | NA | 1 U | NA | **1** | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 10 U | 10 U | 1 U | 5 U | 1 U | 5 U | 10 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Tetrachloroethene | | 127-18-4 | 5 | **0.59 J** | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | NA | 1 U | 1 U | 1 U | 1 U | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | NA | 1 U | 1 U | 1 U | 1 U | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPE-MW2D2 | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| | | | Sample Name | GPE-MW2D2 | GPE-MW-2S | GPEC-MW-XX-072009 | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| | | | Screen Zone | Deep | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow |
| | | | Sample Date | 11/25/2024 | 7/20/2009 | 7/20/2009 | 12/19/2012 | 12/4/2024 | 12/19/2012 | 11/18/2024 | 7/20/2009 |
| | | | Parent Sample Code | | | GPE-MW-2S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | NA | 1 U | 1 U | 1 U | 1 U | NA |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | NA | 1 U | NA | 1 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | **0.79 J** | 5 U | 5 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| Total VOCs | | TVOC | NE | **15.88** | ND | ND | **22.8** | ND | **95.45** | **15.18** | ND |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | 4 U | 4.3 U | 1 U | 10 U | **2.56** | **1.1 J** | 4 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | **0.473 J** | 10 U | 4 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 4 U | 4.3 U | **1.7** | 2 U | **1.32** | 2 U | 4 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U* | **0.46 J** | 10 U | 4 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 4 U | 4.3 U | 0.1 U | 1 U* | 0.1 U | 1 U | 4 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 4 U | 4.3 U | 0.1 U | 1 U* | 0.1 U | 1 U | 4 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 4 U | 4.3 U | 0.1 U | 2 U | 0.1 U | 2 U | 4 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 4 U | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 4 U | 4.3 U | 1 U | 2 U* | 1 U | 2 U | 4 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 4 U | 4.3 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 4 U | 4.3 U | 0.1 U | 2 U | 0.1 U | 2 U | 4 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | **1.7** | ND | **4.813** | **1.1** | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4 U | 4.3 U | NA | NA | NA | NA | 4 U |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4 U | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 4 U | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U* | 1 U | 10 U | 4 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 5 U | 5.4 U | 1 U | 10 U | 1 U | 10 U | 5 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 4 U | 4.3 U | NA | NA | NA | NA | 4 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4 U | 4.3 U | NA | NA | NA | NA | 4 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 4 U | 4.3 U | NA | NA | NA | NA | 4 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 25 U | 27 U | 1 U | 20 U | 1 U | 20 U | 25 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 25 U | 27 U | 1 U | 40 U | 1 U | 40 U | 25 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 4 U | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Area | | | | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental | PDI | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI |
| Location Name | | | | GPE-MW2D2 | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| Sample Name | | | | GPE-MW2D2 | GPE-MW-2S | GPEC-MW-XX-072009 | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| Screen Zone | | | | Deep | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow |
| Sample Date | | | | 11/25/2024 | 7/20/2009 | 7/20/2009 | 12/19/2012 | 12/4/2024 | 12/19/2012 | 11/18/2024 | 7/20/2009 |
| Parent Sample Code | | | | | | GPE-MW-2S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 4 U | 4.3 U | 0.02 U | 1 U | 0.02 U | 1 U | 4 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4 U | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 4 U | 4.3 U | 1 U | 2 U | 1 U | 2 U | 4 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U* | 1 U | 10 U | 4 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U* | 1 U | 10 U | 4 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4 U | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 10 U | 11 U | 1 U | 20 U | 1 U | 20 U | 10 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4 U | 4.3 U | 1 U | 1 U | 1 U | 1 U | 4 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 4 U | 4.3 U | 1 U | 10 U* | 1 U | 10 U | 4 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 25 U | 27 U | 0.1 U | 20 U | 0.1 U | 20 U | 25 U |
| Phenol | | 108-95-2 | 1 | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4 U | 4.3 U | NA | NA | NA | NA | 4 U |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 10 U | 11 U | 1 U | 10 U | 1 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 4 U | 4.3 U | 1 U | 10 U | 1 U | 10 U | 4 U |
| Total SVOCs | | TSVOC | NE | ND | ND | ND | **1.7** | ND | **4.813** | **1.1** | ND |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental | PDI | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI |
| Location Name | | | | GPE-MW2D2 | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| Sample Name | | | | GPE-MW2D2 | GPE-MW-2S | GPEC-MW-XX-072009 | GPE-MW-2S | GPE-MW-2S | GPE-MW-3D | GPE-MW-3D | GPE-MW-3S |
| Screen Zone | | | | Deep | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow |
| Sample Date | | | | 11/25/2024 | 7/20/2009 | 7/20/2009 | 12/19/2012 | 12/4/2024 | 12/19/2012 | 11/18/2024 | 7/20/2009 |
| Parent Sample Code | | | | | | GPE-MW-2S | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1221 | | 11104-28-2 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1232 | | 11141-16-5 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1242 | | 53469-21-9 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1248 | | 12672-29-6 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1254 | | 11097-69-1 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1260 | | 11096-82-5 | NE | 4 U | 0.52 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.55 U |
| Aroclor 1262 | | 37324-23-5 | NE | 4 U | NA | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA |
| Aroclor 1268 | | 11100-14-4 | NE | 4 U | NA | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | ND | 0.05 U | ND | 0.05 U | ND | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | NA | 40 U | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | **1.9 J** | NA | NA | NA | 2 U | NA | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | **2.1** | NA | NA | NA | 2 U | NA | **2.4** | NA |
| Barium | | 7440-39-3 | 1000 | **489** | NA | NA | NA | **111** | NA | **208** | NA |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | NA | 0.8 U | NA | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **58200** | NA | NA | NA | **267000** | NA | **152000** | NA |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | NA | 4 U | NA | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | 4 U | NA | NA | NA | 4 U | NA | **0.58 J** | NA |
| Copper | | 7440-50-8 | 200 | 4 U | NA | NA | NA | 4 U | NA | 4 U | NA |
| Iron | | 7439-89-6 | 300 | 120 U | NA | NA | NA | 120 U | NA | **56.4 J** | NA |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | NA | 1.2 U | NA | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **18500** | NA | NA | NA | **79100** | NA | **97000** | NA |
| Manganese | | 7439-96-5 | 300 | **96.1** | NA | NA | NA | **506** | NA | **774 B** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | NA | 0.2 U | NA | 0.2 U | NA |
| Nickel | | 7440-02-0 | 100 | 4 U | NA | NA | NA | 4 U | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **6790** | NA | NA | NA | **16400** | NA | **95500** | NA |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | NA | **10.5** | NA | **0.56 J** | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **302000** | NA | NA | NA | **481000** | NA | **658000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | NA | 0.8 U | NA | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | NA | 4 U | NA | 4 U | NA |
| Zinc | | 7440-66-6 | 2000* | 16 U | NA | NA | NA | **15.1 J** | NA | 16 U | NA |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **117 J** | **127 J** | **30.4 J** | NA | **197** | NA | **81.5 J** |
| Antimony | | 7440-36-0 | 3 | NA | 15 U | 15 U | 4 U | NA | 4 U | NA | 15 U |
| Arsenic | | 7440-38-2 | 25 | NA | **6.6 J** | 15 U | 2 U | NA | **5.15** | NA | **6.1 J** |
| Barium | | 7440-39-3 | 1000 | NA | **130** | **129** | **198** | NA | **256** | NA | **176** |
| Beryllium | | 7440-41-7 | 3* | NA | 5 U | 5 U | 2 U | NA | 2 U | NA | 5 U |
| Cadmium | | 7440-43-9 | 5 | NA | 5 U | 5 U | 2 U | NA | 2 U | NA | 5 U |
| Calcium | | 7440-70-2 | NE | NA | **138000** | **139000** | **179000** | NA | **125000** | NA | **94600** |
| Chromium | | 7440-47-3 | 50 | NA | **1.4 J** | 5 U | 8 U | NA | 8 U | NA | 5 U |
| Chromium (VI) | | 18540-29-9 | NE | NA | 10 U | 10 U | NA | NA | NA | NA | 10 U |
| Cobalt | | 7440-48-4 | NE | NA | 5 U | 5 U | 8 U | NA | 8 U | NA | **0.96 J** |
| Copper | | 7440-50-8 | 200 | NA | 10 U | 10 U | 8 U | NA | 8 U | NA | **11.6** |
| Iron | | 7439-89-6 | 300 | NA | **254** | **189** | **94 J** | NA | **12300** | NA | **3170** |
| Lead | | 7439-92-1 | 25 | NA | 15 U | 15 U | 2 U | NA | **2.55** | NA | 15 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **25000** | **23500** | **39100** | NA | **46800** | NA | **12300** |
| Manganese | | 7439-96-5 | 300 | NA | **5740** | **5770** | **2940** | NA | **779** | NA | **684** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | 0.2 U | 0.5 U | NA | 0.5 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | **4.6 J** | **3.8 J** | **3.37 J** | NA | **2.1 J** | NA | 5 U |
| Potassium | | 7440-09-7 | NE | NA | **13900** | **16100** | **15000** | NA | **75200** | NA | **11100** |
| Selenium | | 7782-49-2 | 10 | NA | 38 UJ | 38 UJ | 8 U | NA | 8 U | NA | 38 UJ |
| Silver | | 7440-22-4 | 50 | NA | 5 U | 5 U | 2 U | NA | 2 U | NA | 5 U |
| Sodium | | 7440-23-5 | 20000 | NA | **42200** | **42600** | **298000** | NA | **232000** | NA | **52700** |
| Thallium | | 7440-28-0 | 0.5* | NA | 15 U | 15 U | 2 U | NA | 2 U | NA | 15 U |
| Vanadium | | 7440-62-2 | NE | NA | **6.1** | 5 U | 8 U | NA | 8 U | NA | **2.3 J** |
| Zinc | | 7440-66-6 | 2000* | NA | 25 U | 25 U | **9.98** | NA | **10.8** | NA | 25 U |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 5 U | 10 U | 10 U | 2 U | NA | 2 U | NA | 10 U |
| Total Cyanide | | 57-12-5 | 200 | **32.9** | **10.4** | **6.1 J** | 20 U | NA | **58** | NA | **179** |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | NA | NA | 110 U | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | 110 U | NA | NA | NA | 110 U | NA | 120 U | NA |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | NA | NA | 110 U | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | NA | NA | 110 U | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Sample Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/19/2012 | 11/18/2024 | 7/22/2009 | 12/19/2012 | 11/18/2024 | 7/21/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 1 U | 5 U | **0.652 J** | **0.47 J** | 5 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | **1.3 J** | 1 U | 1 U | 5 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | 1 U | NA | NA | **0.4 J** | NA | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Total BTEX | | TBTEX | NE | ND | ND | **1.3** | **0.652** | **0.87** | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 2 U | 5 U | 10 UJ | **23.2** | **7.7** | 10 UJ | 2 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | NA | NA | 20 U | **NA** | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | NA | NA | 20 U | **NA** | NA | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 5 UJ | 1 U | 1 U | 5 UJ | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 5 UJ | 1 U | 1 U | 5 UJ | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | **0.26 J** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 1 U | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | NA | **0.765 J** | **0.33 J** | NA | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | 5 U | NA | NA | 5 U | NA | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Sample Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/19/2012 | 11/18/2024 | 7/22/2009 | 12/19/2012 | 11/18/2024 | 7/21/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | ND | **0.26** | **1.3** | **24.617** | **8.9** | ND | ND | ND |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 10 U | **3.2 J** | **4.03** | **2.5 J** | 4.4 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 10 U | **0.64 J** | **0.419 J** | 10 U | 4.4 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 10 U | **0.76 J** | **0.447 J** | 10 U | 4.4 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 10 U | **1.2 J** | **0.862 J** | 10 U | 4.4 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 10 U | **1.3 J** | **0.749 J** | **1.1 J** | 4.4 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 1 U | 2 U | **7.4** | **4.5** | **1.1 J** | 4.4 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 10 U | **2.4 J** | **1.15** | 10 U | 4.4 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 10 U | **0.92 J** | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | ND | **17.82** | **12.157** | **4.7** | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 2 U | **1 J** | 1 U | 2 U | 4.4 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 10 U | **0.52 J** | **0.311 J** | 10 U | 4.4 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 10 U | 5.4 U | 1 U | 10 U | 5.6 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 10 U | **3 J** | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 20 U | 27 U | 1 U | 20 U | 28 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 40 U | 27 U | 1 U | 40 U | 28 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Sample Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/19/2012 | 11/18/2024 | 7/22/2009 | 12/19/2012 | 11/18/2024 | 7/21/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 1 U | 4.3 U | 0.02 U | 1 U | 4.4 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 20 U | 11 U | 1 U | 20 U | 11 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 20 U | 27 U | 0.1 U | 20 U | 28 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 10 U | 11 U | 1 U | 10 U | 11 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | ND | **22.34** | **12.468** | **4.7** | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Sample Name | GPE-MW-3S | GPE-MW-3S | GPE-MW-4D | GPE-MW-4D | GPE-MW-4D | GPE-MW-4S | GPE-MW-4S | GPE-MW-4S |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/19/2012 | 11/18/2024 | 7/22/2009 | 12/19/2012 | 11/18/2024 | 7/21/2009 | 12/20/2012 | 11/18/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.4 U | 0.54 UJ | 0.05 U | 0.4 U | 0.55 UJ | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | ND | 0.05 U | ND | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | 40 U | NA | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | 2 U | NA | NA | **7.4** | NA | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | **131** | NA | NA | **42.6** | NA | NA | **93.5** |
| Beryllium | | 7440-41-7 | 3* | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | **0.47 J** | NA | NA | 2 U | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **68900** | NA | NA | **74400** | NA | NA | **51700** |
| Chromium | | 7440-47-3 | 50 | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | **2 J** | NA | NA | **0.75 J** | NA | NA | **1.5 J** |
| Copper | | 7440-50-8 | 200 | NA | **2.2 J** | NA | NA | 4 U | NA | NA | **2.1 J** |
| Iron | | 7439-89-6 | 300 | NA | 120 U | NA | NA | **66.3 J** | NA | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **16800** | NA | NA | **33100** | NA | NA | **10600** |
| Manganese | | 7439-96-5 | 300 | NA | **295 B** | NA | NA | **248 B** | NA | NA | **309 B** |
| Mercury | | 7439-97-6 | 0.7 | NA | **0.14 J** | NA | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | **1.5 J** | NA | NA | 4 U | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | **6850** | NA | NA | **40100** | NA | NA | **6100** |
| Selenium | | 7782-49-2 | 10 | NA | 2.5 U | NA | NA | **0.64 J** | NA | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **86700** | NA | NA | **171000** | NA | NA | **35800** |
| Thallium | | 7440-28-0 | 0.5* | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | **9.1 J** | NA | NA | 16 U | NA | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **32.3 J** | NA | **2760** | **207** | NA | **238** | **75.5** | NA |
| Antimony | | 7440-36-0 | 3 | 4 U | NA | 15 U | 4 U | NA | 15 U | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | **3.64** | NA | **54.1** | **25.2** | NA | 15 U | **2.5** | NA |
| Barium | | 7440-39-3 | 1000 | **116** | NA | **99.9** | **168** | NA | **117** | **156** | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | NA | **0.29 J** | 2 U | NA | 5 U | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **102000** | NA | **87700** | **94400** | NA | **59500** | **93200** | NA |
| Chromium | | 7440-47-3 | 50 | 8 U | NA | **8.7** | 8 U | NA | 5 U | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | 8 U | NA | **3.7 J** | 8 U | NA | **3.5 J** | **4.03 J** | NA |
| Copper | | 7440-50-8 | 200 | **4.07 J** | NA | **66.2** | 8 U | NA | 10 U | **4.94 J** | NA |
| Iron | | 7439-89-6 | 300 | **3430** | NA | **12700** | **7170** | NA | **4220** | **3610** | NA |
| Lead | | 7439-92-1 | 25 | **1.29 J** | NA | **40.1** | **1.56 J** | NA | 15 U | **2.46** | NA |
| Magnesium | | 7439-95-4 | 35000* | **43400** | NA | **28500** | **39800** | NA | **10400** | **27600** | NA |
| Manganese | | 7439-96-5 | 300 | **629** | NA | **280** | **251** | NA | **385** | **438** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | NA | **0.4 J** | 0.5 U | NA | 0.2 U | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **1.35 J** | NA | **19** | **1.65 J** | NA | **7.1** | **6.35** | NA |
| Potassium | | 7440-09-7 | NE | **18100** | NA | **29900** | **36000** | NA | **6410** | **11100** | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | NA | 38 U | 8 U | NA | 38 U | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **338000** | NA | **145000** | **265000** | NA | **51300** | **233000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | NA | 15 U | 2 U | NA | 15 U | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | 8 U | NA | **13.2** | 8 U | NA | **3.3 J** | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | **11.7** | NA | **66.5** | **4.9 J** | NA | **42.8** | **23.3** | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | NA | **2 J** | 2 U | NA | 10 U | 2 U | NA |
| Total Cyanide | | 57-12-5 | 200 | **103** | NA | 10 U | **945** | NA | 10 U | 20 U | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | NA | 110 U | NA | NA | 110 U | NA | NA | 120 U |
| C11-C22 Aromatics | | AROM11-22 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | Location Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | Sample Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Deep | Deep |
| | | | Sample Date | 7/23/2009 | 12/21/2012 | 3/28/2017 | 11/5/2024 | 3/27/2017 | 11/8/2024 | 3/27/2017 | 11/14/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **2.3 J** | **2.22** | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| Toluene | | 108-88-3 | 5 | 5 U | **0.472** | 0.5 U | 1 U | 0.5 U | 1 U | **3.17** | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 5 U | 1 U | **2.21** | 1 U | 0.5 U | 1 U | **137** | **13** |
| o-Xylene | | 95-47-6 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | **4.5** |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | **2.5** |
| Total Xylene | | 1330-20-7 | 5 | 5 U | 2 U | **1.07** | NA | 1 U | NA | **91** | NA |
| Total BTEX | | TBTEX | NE | **2.3** | **2.692** | **3.28** | ND | ND | ND | **231.2** | **20** |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 10 UJ | 5 U | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | 10 U | NA | 10 U | NA | 10 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U* |
| Bromoform | | 75-25-2 | 50* | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U* |
| Bromomethane | | 74-83-9 | 5 | 5 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Carbon disulfide | | 75-15-0 | 60* | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U* |
| Chlorobenzene | | 108-90-7 | 5 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 5 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 5 U | 1 U | 0.5 U | 1 U | **0.537** | 1 U | **2.12** | 1 U |
| Chloromethane | | 74-87-3 | 5 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U* |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 5 U | 1 U | **3.5** | **1.8** | **2.3** | **2** | **0.57** | **0.53 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 5 U | 1 U | **0.86** | **0.64 J** | **1.34** | **1.3** | **0.91** | **1.7** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 5 U | 1 U | **0.832** | 1 U | **0.719** | **0.42 J** | 0.5 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 5 U | 1 U | **0.584** | **1.4** | **0.632** | **5.3** | **8.73** | **9.4** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 5 U | 2 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 10 U | 2 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | **3** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 0.5 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 10 U | **30.6** | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 5 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Styrene | | 100-42-5 | 5 | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | NA | 5 U | NA | 5 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 10 U | 1 U | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 5 U | 1 U | **1.49** | 1 U | **8.14** | **2.1** | **5.59** | **1.4** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | NA | 1 U | NA | 1 U* | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U* | 1 U | 1 U |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** | **Area 2** |
| **Investigation Phase** | | | | **PDI** | **Phase 1** | **Supplemental Inv.** | **Supplemental** | **Supplemental Inv.** | **Supplemental** | **Supplemental Inv.** | **Supplemental** |
| **Location Name** | | | | **PZ-2** | **PZ-2** | **GPEC-MW405** | **GPEC-MW405** | **GPEC-MW406** | **GPEC-MW406** | **GPEC-MW407** | **GPEC-MW407** |
| **Sample Name** | | | | **PZ-2** | **PZ-2** | **GPEC-MW405** | **GPEC-MW405** | **GPEC-MW406** | **GPEC-MW406** | **GPEC-MW407** | **GPEC-MW407** |
| **Screen Zone** | | | | **Shallow** | **Shallow** | **Intermediate** | **Intermediate** | **Deep** | **Deep** | **Deep** | **Deep** |
| **Sample Date** | | | | **7/23/2009** | **12/21/2012** | **3/28/2017** | **11/5/2024** | **3/27/2017** | **11/8/2024** | **3/27/2017** | **11/14/2024** |
| **Parent Sample Code** | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 5 U | 1 U | 0.5 U | 1 U | **0.606** | 1 U | 0.5 U | **0.25 J** |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 5 U | 1 U | **1.21** | **0.46 J** | **1.42** | **2.9** | **1.57** | **1.3** |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 5 U | 1 U | 1 U | **2.2** | 1 U | **0.37 J** | 1 U | **0.96 J** |
| Total VOCs | | TVOC | NE | **2.3** | **33.292** | **11.756** | **6.5** | **15.694** | **14.39** | **250.69** | **38.54** |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **5.1** | **2.04** | **28.4** | 10 U | **2.51** | 10 U | **37.5** | **16** |
| Acenaphthylene | | 208-96-8 | NE | 4.3 U | 1 U | **21.1** | 10 U | **0.39 J** | 10 U | **6.8** | **2 J** |
| Anthracene | | 120-12-7 | 50* | 4.3 U | 1 U | **4.58** | 10 U | **0.622 J** | 10 U | **4.39** | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 4.3 U | 1 U | **1.87** | 10 U | **0.916 J** | 10 U | **1.38** | 10 U |
| Fluorene | | 86-73-7 | 50* | **0.56 J** | 1 U | **2.28** | 10 U | **2.2** | 10 U | **23.7** | **1 J** |
| 2-Methylnaphthalene | | 91-57-6 | NE | 4.3 U | 1 U | **3.17** | 10 U | **0.826 J** | 10 U | **18.4** | 10 U |
| Naphthalene | | 91-20-3 | 10* | **1.9 J** | 1 U | **6.52** | 2 U | **1.34** | 2 U | **627 D** | **32** |
| Phenanthrene | | 85-01-8 | 50* | 4.3 U | 1 U | **21.6** | 10 U | **1.85** | 10 U | **24.1** | **2.7 J** |
| Pyrene | | 129-00-0 | 50* | 4.3 U | 1 U | **2.66** | 10 U | **1.53** | 10 U | **2.01** | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 4.3 U | 0.1 U | **0.296 J** | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 4.3 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 4.3 U | 0.1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 4.3 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 4.3 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 4.3 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 4.3 U | 0.1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Total PAHs | | TPAH | NE | **7.56** | **2.04** | **92.48** | ND | **12.18** | ND | **745.3** | **53.7** |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | NA | 2 U | NA | 2 U* | NA | 2 U* |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Benzyl alcohol | | 100-51-6 | NE | 4.3 U | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | NA | 10 U | NA | 10 U | NA | **4.3 J** |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 4.3 U | 1 U | **1.08** | 2 U | 1 U | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | **1.99** | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 5.4 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 4.3 U | 1 U | **0.165 J** | 10 U | **0.211 J** | 10 U | **1.54** | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | **0.5 J** | 1 U | **1.69** | 10 U | **0.222 J** | 10 U | **3.77** | **1.9 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 4.3 U | NA | 1 U | NA | 1 U | NA | 1 U | **NA** |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 4.3 U | NA | 1 U | NA | 1 U | NA | 1 U | **NA** |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 4.3 U | NA | 1 U | NA | 1 U | NA | 1 U | **NA** |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 4.3 U | 1 U | **0.159 J** | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | **0.865 J** | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 27 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 27 U | 1 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4.3 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 4.3 U | 1 U | **0.319 J** | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | Location Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | Sample Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Deep | Deep |
| | | | Sample Date | 7/23/2009 | 12/21/2012 | 3/28/2017 | 11/5/2024 | 3/27/2017 | 11/8/2024 | 3/27/2017 | 11/14/2024 |
| | | | Parent Sample Code | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 4.3 U | 0.02 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 4.3 U | 1 U | 1 U | 10 U* | 1 U | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 4.3 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 4.3 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 11 U | 1 U | 1 U | 20 U | 1 U | 20 U | **1.13** | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 4.3 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 27 U | 0.1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 4.3 U | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 11 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 4.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | **8.06** | **2.04** | **95.893** | ND | **12.613** | ND | **754.595** | **59.9** |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | PDI | Phase 1 | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | | Location Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | | Sample Name | PZ-2 | PZ-2 | GPEC-MW405 | GPEC-MW405 | GPEC-MW406 | GPEC-MW406 | GPEC-MW407 | GPEC-MW407 |
| | | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Deep | Deep |
| | | | | Sample Date | 7/23/2009 | 12/21/2012 | 3/28/2017 | 11/5/2024 | 3/27/2017 | 11/8/2024 | 3/27/2017 | 11/14/2024 |
| | | | | Parent Sample Code | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | | 0.56 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | | NA | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | | NA | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | | ND | 0.05 U | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | | NA | NA | NA | 40 U | NA | 40 U | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | | NA | NA | NA | **0.48 J** | NA | 2 U | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | | NA | NA | NA | 2 U | NA | **16** | NA | **28.3** |
| Barium | | 7440-39-3 | 1000 | | NA | NA | NA | **28.7** | NA | **32** | NA | **47.9** |
| Beryllium | | 7440-41-7 | 3* | | NA | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | | NA | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | | NA | NA | NA | **63100** | NA | **62300** | NA | **68900** |
| Chromium | | 7440-47-3 | 50 | | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Copper | | 7440-50-8 | 200 | | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | | NA | NA | NA | 120 U | NA | **70.5 J** | NA | 120 U |
| Lead | | 7439-92-1 | 25 | | NA | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | | NA | NA | NA | **36100** | NA | **27600** | NA | **33000** |
| Manganese | | 7439-96-5 | 300 | | NA | NA | NA | **1660** | NA | **1040** | NA | **1410** |
| Mercury | | 7439-97-6 | 0.7 | | NA | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Potassium | | 7440-09-7 | NE | | NA | NA | NA | **17100** | NA | **6190** | NA | **8940** |
| Selenium | | 7782-49-2 | 10 | | NA | NA | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | | NA | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | | NA | NA | NA | **275000** | NA | **189000** | NA | **237000** |
| Thallium | | 7440-28-0 | 0.5* | | NA | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | | NA | NA | NA | 16 U | NA | 16 U | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | | **25.3 J** | **92.8** | **151** | NA | **72.1** | NA | **138** | NA |
| Antimony | | 7440-36-0 | 3 | | 15 U | 4 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | | **24.9** | **26** | 2 U | NA | **3.87** | NA | **2.5** | NA |
| Barium | | 7440-39-3 | 1000 | | **87.8** | **230** | **65.5** | NA | **51.4** | NA | **101** | NA |
| Beryllium | | 7440-41-7 | 3* | | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | | **48400** | **105000** | **73400** | NA | **113000** | NA | **114000** | NA |
| Chromium | | 7440-47-3 | 50 | | **0.67 J** | 8 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | | **2.8 J** | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | | **9.5** | **9.61** | 2 U | NA | 2 U | NA | 2 U | NA |
| Copper | | 7440-50-8 | 200 | | 10 U | 8 U | **7.48** | NA | **2.88** | NA | **7.28** | NA |
| Iron | | 7439-89-6 | 300 | | **23700** | **72700** | **13700** | NA | **8550** | NA | **8660** | NA |
| Lead | | 7439-92-1 | 25 | | 15 U | **1.11** | **5.3** | NA | **0.787 J** | NA | **1.25 J** | NA |
| Magnesium | | 7439-95-4 | 35000* | | **10700** | **30000** | **41300** | NA | **55400** | NA | **60200** | NA |
| Manganese | | 7439-96-5 | 300 | | **212** | **556** | **1570** | NA | **1620** | NA | **1380** | NA |
| Mercury | | 7439-97-6 | 0.7 | | 0.2 U | 0.5 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | | **4.7 J** | **4.14** | 2 U | NA | 2 U | NA | **24.1** | NA |
| Potassium | | 7440-09-7 | NE | | **8880** | **11100** | **13100** | NA | **6290** | NA | **7350** | NA |
| Selenium | | 7782-49-2 | 10 | | 38 U | 8 U | **1.67 J** | NA | 8 U | NA | 8 U | NA |
| Silver | | 7440-22-4 | 50 | | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | | **94100** | **268000** | **228000** | NA | **230000** | NA | **279000** | NA |
| Thallium | | 7440-28-0 | 0.5* | | **4.2 J** | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | | **1.7 J** | 8 U | **1.84 J** | NA | **1.32 J** | NA | **1.33 J** | NA |
| Zinc | | 7440-66-6 | 2000* | | **42.7** | **16.7** | **8.34** | NA | **14.1** | NA | **7.75** | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | | **2 J** | **7** | 5 U | NA | 5 U | NA | 5 U | NA |
| Total Cyanide | | 57-12-5 | 200 | | **644** | **331** | **29** | NA | **133** | NA | **20** | NA |
| **Other** | µg/L | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | | NA | NA | NA | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | | NA | NA | NA | NA | NA | 110 U | NA | NA |
| C19-C36 Aliphatics | | EPH1936 | NE | | NA | NA | NA | 100 U | NA | 110 U | NA | 110 U |
| C11-C22 Aromatics | | AROM11-22 | NE | | NA | NA | NA | NA | NA | 110 U | NA | NA |
| C11-C22 Aromatics | | EPH1122 | NE | | NA | NA | NA | NA | NA | 110 U | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Sample Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW-XX-032417 | GPEC-MW409 FILT | GPEC-MW-XX-032417 FILT | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/3/2024 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 11/20/2024 | 3/27/2017 | 11/8/2024 |
| | | | Parent Sample Code | | | GPEC-MW409 | | GPEC-MW409 FILT | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 0.5 U | 0.5 U | NA | NA | **0.3 J** | **2.62** | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | **0.545** | **0.42 J** | NA | NA | **0.73 J** | **1.86** | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | NA | 1 U | 1 U | NA | NA | NA | **4.1** | NA |
| Total BTEX | | TBTEX | NE | ND | **0.545** | **0.42** | NA | NA | **1.03** | **8.58** | ND |
| **Other VOCs** | µg/L | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 2 U | 2 U | NA | NA | 5 U | 2 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 10 U | 10 U | NA | NA | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | 10 U | 10 U | NA | NA | NA | 10 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | 2 R | 2 R | NA | NA | NA | 2 U | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 2 R | 2 R | NA | NA | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **0.53 J** | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **0.61 J** | **1.1** | **0.991** | NA | NA | 1 U | 0.5 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 0.5 U | 0.5 U | NA | NA | NA | 0.5 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 2 U | 2 U | NA | NA | 5 U | 1 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | NA | NA | **0.51 J** | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 2 U | 2 U | NA | NA | 5 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | NA | NA | 5 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 2 U | 2 U | NA | NA | 5 U | 2 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U* |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U* |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Sample Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW-XX-032417 | GPEC-MW409 FILT | GPEC-MW-XX-032417 FILT | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/3/2024 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 11/20/2024 | 3/27/2017 | 11/8/2024 |
| | | | Parent Sample Code | | | GPEC-MW409 | | GPEC-MW409 FILT | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 0.5 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 0.5 U | 0.5 U | NA | NA | NA | 0.5 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **1.14** | **1.645** | **1.411** | NA | NA | **1.54** | **8.58** | ND |
| **PAHs** | µg/L | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **1.7 J** | **0.946 J** | **0.924 J** | NA | NA | **5.4 J** | **37.2** | **3 J** |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | **1.74** | 10 U |
| Anthracene | | 120-12-7 | 50* | 10 U | **0.286 J** | **0.247 J** | NA | NA | 10 U | **3.41** | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 1 UJ | 1 UJ | NA | NA | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | **0.247 J** | **0.29 J** | NA | NA | 10 U | **2.11** | 10 U |
| Fluorene | | 86-73-7 | 50* | 10 U | **0.504 J** | **0.462 J** | NA | NA | 10 U | **2.26** | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | **2.76** | 10 U |
| Naphthalene | | 91-20-3 | 10* | **1.1 J** | **0.284 J** | **0.282 J** | NA | NA | **0.63 J** | **16.8** | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U* | **1.12** | **0.562 J** | NA | NA | 10 U | **10.7** | 10 U |
| Pyrene | | 129-00-0 | 50* | 10 U | **0.396 J** | **0.423 J** | NA | NA | 10 U | **3.53** | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U* | **0.274 J** | 1 U | NA | NA | 1 U | **0.528 J** | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U* | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 1 U | 1 U | NA | NA | 2 U | 1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 1 UJ | 1 UJ | NA | NA | 1 U | 1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U* | 1 U | 1 U | NA | NA | 2 U | **0.334 J** | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 1 UJ | 1 UJ | NA | NA | 1 U | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 1 UJ | 1 UJ | NA | NA | 2 U | 1 U | 2 U |
| Total PAHs | | TPAH | NE | **2.8** | **4.057** | **3.19** | NA | NA | **6.03** | **81.37** | **3** |
| **Other SVOCs** | µg/L | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | NA | NA | NA | 2 U | NA | 2 U* |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| Benzoic acid | | 65-85-0 | NE | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 1 U | 1 U | NA | NA | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 10 U* | 1 U | 1 U | NA | NA | 10 U | **0.617 J** | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 1 U | 1 U | NA | NA | 10 U | **3.33** | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | **0.649 J** | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | **0.49 J** | **0.373 J** | NA | NA | 10 U | **0.203 J** | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 1 U | 1 U | NA | NA | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 1 U | 1 U | NA | NA | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 1 U | 1 U | NA | NA | 2 U | **2.73** | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
| | | | Investigation Phase | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Sample Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW-XX-032417 | GPEC-MW409 FILT | GPEC-MW-XX-032417 FILT | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/3/2024 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 11/20/2024 | 3/27/2017 | 11/8/2024 |
| | | | Parent Sample Code | | | GPEC-MW409 | | GPEC-MW409 FILT | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 1 U | 1 U | NA | NA | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U* | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U* | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | NA | NA | 1 U | **0.43 J** | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 1 U | 1 U | NA | NA | 20 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | NA | NA | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U* | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 1 U | 1 U | NA | NA | 20 U | 1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | NA | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 1 U | 1 U | NA | NA | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | **2.8** | **4.547** | **3.563** | NA | NA | **6.03** | **89.329** | **3** |
| **PFAS** | ng/L | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 14. Groundwater Analytical Results - Loading Platform Area**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 | Area 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Investigation Phase | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental Inv. | Supplemental | Supplemental Inv. | Supplemental |
| | | | | Location Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | | Sample Name | GPEC-MW408 | GPEC-MW409 | GPEC-MW-XX-032417 | GPEC-MW409 FILT | GPEC-MW-XX-032417 FILT | GPEC-MW409 | GPEC-MW410 | GPEC-MW410 |
| | | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate |
| | | | | Sample Date | 12/3/2024 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 3/24/2017 | 11/20/2024 | 3/27/2017 | 11/8/2024 |
| | | | | Parent Sample Code | | | GPEC-MW409 | | GPEC-MW409 FILT | | | |
| **PCBs** | µg/L | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U* |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | 0.05 UJ | 0.05 UJ | NA | NA | 0.4 U | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 UJ | 0.05 UJ | NA | NA | ND | 0.05 U | ND |
| **Dissolved Metals** | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | NA | NA | 40 U | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | 2 U | NA | NA | NA | NA | 2 U | NA | **0.59 J** |
| Arsenic | | 7440-38-2 | 25 | **12.7** | NA | NA | NA | NA | **8.7** | NA | **6.9** |
| Barium | | 7440-39-3 | 1000 | **63.8** | NA | NA | NA | NA | **149** | NA | **152** |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | NA | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | NA | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | **82300** | NA | NA | NA | NA | **254000** | NA | **146000** |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | NA | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | 4 U | NA | NA | NA | NA | 4 U | NA | 4 U |
| Copper | | 7440-50-8 | 200 | 4 U | NA | NA | NA | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | 120 U | NA | NA | NA | NA | 120 U | NA | 120 U |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | NA | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | **43600** | NA | NA | NA | NA | **645000** | NA | **318000** |
| Manganese | | 7439-96-5 | 300 | **780** | NA | NA | NA | NA | **586** | NA | **234** |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | NA | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | 4 U | NA | NA | NA | NA | 4 U | NA | 4 U |
| Potassium | | 7440-09-7 | NE | **13300** | NA | NA | NA | NA | **184000** | NA | **104000** |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | NA | NA | 2.5 U | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | NA | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | **332000** | NA | NA | NA | NA | **5780000** | NA | **2890000** |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | NA | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | NA | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | **11.9 J** | NA | NA | NA | NA | 16 U | NA | **4.2 J** |
| **Total Metals** | µg/L | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **17.2** | **17.5** | NA | NA | NA | **146** | NA |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | NA | **6.67** | **7.2** | NA | NA | NA | **1.8 J** | NA |
| Barium | | 7440-39-3 | 1000 | NA | **12.5** | **13.5** | NA | NA | NA | **260** | NA |
| Beryllium | | 7440-41-7 | 3* | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | NA | **37100** | **38500** | NA | NA | NA | **153000** | NA |
| Chromium | | 7440-47-3 | 50 | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Copper | | 7440-50-8 | 200 | NA | **6.49** | **5.35** | NA | NA | NA | **6.78** | NA |
| Iron | | 7439-89-6 | 300 | NA | **294** | **298** | **16.7 J** | **31.8** | NA | **1450** | NA |
| Lead | | 7439-92-1 | 25 | NA | 2 U | 2 U | NA | NA | NA | **2.97** | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | **16000** | **16400** | NA | NA | NA | **367000** | NA |
| Manganese | | 7439-96-5 | 300 | NA | **263** | **273** | NA | NA | NA | **393** | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.5 U | 0.5 U | NA | NA | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | NA | **1.91 J** | **1.18 J** | NA | NA | NA | 2 U | NA |
| Potassium | | 7440-09-7 | NE | NA | **7010** | **7210** | NA | NA | NA | **109000** | NA |
| Selenium | | 7782-49-2 | 10 | NA | **2.55** | 2 U | NA | NA | NA | 8 U | NA |
| Silver | | 7440-22-4 | 50 | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | NA | **98100** | **101000** | NA | NA | NA | **3190000 D** | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | 2 U | 2 U | NA | NA | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | NA | 2 U | 2 U | NA | NA | NA | **3.55** | NA |
| Zinc | | 7440-66-6 | 2000* | NA | **1.42 J** | 2 U | NA | NA | NA | **5.62** | NA |
| **Cyanides (ug/L)** | µg/L | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | 5 U | 5 U | NA | NA | NA | 5 U | NA |
| Total Cyanide | | 57-12-5 | 200 | NA | 20 U | 20 U | NA | NA | NA | 20 U | NA |
| **Other** | µg/L | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | 500 U | 500 U | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | **27600 J** | **45400 J** | NA | NA | NA | NA | NA |
| C9-C18 Aliphatics | | EPH918 | NE | 110 U | NA | NA | NA | NA | NA | NA | 110 U |
| C19-C36 Aliphatics | | EPH1936 | NE | 110 U | NA | NA | NA | NA | 120 U | NA | 110 U |
| C11-C22 Aromatics | | AROM11-22 | NE | 110 U | NA | NA | NA | NA | NA | NA | 110 U |
| C11-C22 Aromatics | | EPH1122 | NE | 110 U | NA | NA | NA | NA | NA | NA | 110 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI | PDI | Phase 1 |
| | | | Location Name | GPEC-GT01 | GPEC-GT01 | GPEC-GT01 | GPEC-GT01S | GPEC-GT01S | GPEC-GT01S | GPEC-GT03 | GPEC-GT03 | GPEC-GT03 | | GPEC-GT04D | GPEC-GT04D | GPEC-GT04D |
| | | | Sample Name | GPEC-GT-1 | GPEC-GT-01 | GPEC-GT-1 (MW-18) | GPEC-GT01S | GPEC-GT01S FILT | GPEC-GT-1S | GPEC-GT-3 | GPEC-GT-XX-102109 | GPEC-GT-3 (MW-16) | GPEC-GT-3(MW-16) | GPEC-GT-4D | GPEC-GT-4D (MW-14D) | |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | |
| | | | Sample Date | 10/22/2009 | 12/19/2012 | 11/6/2024 | 3/21/2017 | 3/21/2017 | 11/6/2024 | 10/21/2009 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 10/20/2009 | 12/20/2012 | |
| | | | Parent Sample Code | | | | | | | | GPEC-GT-3 | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **1.3 J** | 1 U | 1 U | 0.5 U | NA | 1 U | **350 J** | **280 J** | **322** | **62** | **0.84 J** | **1.94** | |
| Toluene | | 108-88-3 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | **11000** | **8800** | **11800** | **2100** | 5 U | 1 U | |
| Ethylbenzene | | 100-41-4 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | **3600** | **3300** | **3750** | **1400** | 5 U | 1 U | |
| o-Xylene | | 95-47-6 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **1800** | NA | NA | |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **3500** | NA | NA | |
| Total Xylene | | 1330-20-7 | 5 | 5 U | 2 U | NA | 1 U | NA | NA | **36000** | **30000** | **28200** | NA | 5 U | 2 U | |
| Total BTEX | | TBTEX | NE | **1.3** | ND | ND | ND | NA | ND | **50950** | **42380** | **44072** | **8862** | **0.84** | **1.94** | |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | **22 J** | 2 U | 5 U | 2 U | NA | **8.9** | 2000 UJ | 2000 U | 500 U | 50 U | 10 UJ | 2 U | |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | NA | 20 U | NA | NA | NA | NA | 2000 U | NA | NA | 20 U | |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 10 U | NA | NA | NA | NA | 2000 U | NA | NA | 20 U | |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| Bromodichloromethane | | 75-27-4 | 50* | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Bromoform | | 75-25-2 | 50* | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Bromomethane | | 74-83-9 | 5 | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | 2 U | NA | NA | NA | NA | NA | NA | NA | NA | |
| Carbon disulfide | | 75-15-0 | 60* | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Carbon tetrachloride | | 56-23-5 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Chlorobenzene | | 108-90-7 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Chloroethane | | 75-00-3 | 5 | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 1 U | NA | NA | NA | NA | 100 U | NA | NA | 1 U | |
| Chloroform | | 67-66-3 | 7 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Chloromethane | | 74-87-3 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **4.3 J** | NA | NA | |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| Dibromochloromethane | | 124-48-1 | 50* | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | 1 U | NA | 1 U | NA | NA | 100 U | 10 U | NA | 1 U | |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | **0.826 J** | |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | **5.8** | **5.08** | |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | **1.3 J** | **1.83** | |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | NA | NA | NA | NA | 100 U | NA | NA | 1 U | |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 200 U | 10 U | 5 U | 1 U | |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 0.5 U | NA | NA | NA | NA | 100 U | NA | NA | 1 U | |
| 2-Hexanone | | 591-78-6 | 50* | 10 UJ | 1 U | 5 U | 1 U | NA | 5 U | 2000 U | 2000 U | 200 U | 50 U | 10 U | 1 U | |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **15** | NA | NA | |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 1 U | 0.5 U | NA | 1 U | NA | NA | 100 U | 10 U | NA | 1 U | |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 10 U | 1 U | 5 U | 1 U | NA | 5 U | 2000 U | 2000 U | 100 U | 50 U | 10 U | **1.23** | |
| Methylene chloride | | 75-09-2 | 5 | 5 U | 2 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 200 U | 10 U | 5 U | 2 U | |
| Styrene | | 100-42-5 | 5 | 5 U | 1 U | 1 U | 1 U | NA | 1 U | **21000** | **18000** | **17200** | **2100** | 5 U | 1 U | |
| Methyl acetate | | 79-20-9 | NE | NA | NA | 5 U | NA | NA | 5 U | NA | NA | NA | 50 U | NA | NA | |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 10 UJ | 1 U | 5 U | 2 U | NA | 5 U | 2000 UJ | 2000 U | 100 U | 50 U | 10 UJ | 1 U | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |
| Tetrachloroethene | | 127-18-4 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | **0.89 J** | **1.37** | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | 1 U | NA | 1 U | NA | NA | 100 U | 10 U | NA | 1 U | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 10 U | NA | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | 1 U | NA | 1 U | NA | NA | 100 U | 10 U | NA | 1 U | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U | |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-GT01 | GPEC-GT01 | GPEC-GT01 | GPEC-GT01S | GPEC-GT01S | GPEC-GT01S | GPEC-GT03 | GPEC-GT03 | GPEC-GT03 | | GPEC-GT04D | GPEC-GT04D |
| | | | Sample Name | GPEC-GT-1 | GPEC-GT-01 | GPEC-GT-1 (MW-18) | GPEC-GT01S | GPEC-GT01S FILT | GPEC-GT-1S | GPEC-GT-3 | GPEC-GT-XX-102109 | GPEC-GT-3 (MW-16) | GPEC-GT-3(MW-16) | GPEC-GT-4D | GPEC-GT-4D (MW-14D) |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | Sample Date | 10/22/2009 | 12/19/2012 | 11/6/2024 | 3/21/2017 | 3/21/2017 | 11/6/2024 | 10/21/2009 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 10/20/2009 | 12/20/2012 |
| | | | Parent Sample Code | | | | | | | | GPEC-GT-3 | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 5 U | 1 U | 1 U | 1 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 5 U | 1 U | 1 U | 0.5 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | **6.1** | **8.75** |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | 1 U | 1 U | NA | 1 U | NA | NA | 100 U | 10 U | NA | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 0.5 U | NA | NA | NA | NA | 100 U | NA | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | NA | NA | NA | 100 U | NA | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | 5 U | 1 U | 1 U | 2 U | NA | 1 U | 1000 U | 1000 U | 100 U | 10 U | 5 U | 1 U |
| Total VOCs | | TVOC | NE | **23.3** | ND | ND | ND | NA | **8.9** | **71950** | **60380** | **61272** | **10981.3** | **14.93** | **21.026** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | **9.62** | **1.4 J** | 4 U | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | **9.5** | 10 U | 4 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Fluorene | | 86-73-7 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | **340 J** | **340 J** | **115** | **6.6 J** | 4 U | 1 U |
| Naphthalene | | 91-20-3 | 10* | 4 U | 1 U | 2 UH | 1 U | NA | 2 UH | **10000** | **11000** | **3520** | **700** | 4 U | **0.811 J** |
| Phenanthrene | | 85-01-8 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Pyrene | | 129-00-0 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 4 U | 0.1 U | 1 UH | 0.1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 4 U | 0.1 U | 1 UH | 0.1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 4 U | 0.1 U | 2 UH | 0.1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 4 U | 0.1 U | 1 UH | 0.1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 4 U | 1 U | 2 UH | 1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 4 U | 0.1 U | 1 UH | 0.1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 4 U | 0.1 U | 2 UH | 0.1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 0.1 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | NA | ND | **10340** | **11340** | **3654.12** | **708** | ND | **0.811** |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 UH | NA | NA | 2 UH | NA | NA | NA | 2 U* | NA | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | 10 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 4 U | NA | NA | 1 U | NA | NA | 900 U | 830 U | NA | NA | 4 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 4 U | 1 U | 1 UH | 1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 UJ | 830 UJ | 30 U | 10 U | 4 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 4 U | 1 U | 2 UH | 1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| Carbazole | | 86-74-8 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | **14.7** | **2.2 J** | 4 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 5 U | 1 U | 10 UH | 1 U | NA | 10 UH | 1100 U | 1000 U | 30 U | 10 U | 5 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 4 U | NA | NA | 1 U | NA | NA | 900 U | 830 U | NA | NA | 4 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 4 U | NA | NA | 1 U | NA | NA | 900 U | 830 U | NA | NA | 4 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 4 U | NA | NA | 1 U | NA | NA | 900 U | 830 U | NA | NA | 4 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | **5.5 J** | 4 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | **0.52 J** | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 25 U | 1 U | 20 UH | 10 U | NA | 20 UH | 5600 U | 5200 U | 30 U | 20 U | 25 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 25 U | 1 U | 40 UH | 1 U | NA | 40 UH | 5600 U | 5200 U | 30 U | 40 U | 25 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4 U | 1 U | 10 UH | 10 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4 U | 1 U | 2 UH | 1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 1 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 4 U | 0.02 U | 1 UH | 0.02 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 0.02 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-GT01 | GPEC-GT01 | GPEC-GT01 | GPEC-GT01S | GPEC-GT01S | GPEC-GT01S | GPEC-GT03 | GPEC-GT03 | GPEC-GT03 | | GPEC-GT04D | GPEC-GT04D |
| | | | Sample Name | GPEC-GT-1 | GPEC-GT-01 | GPEC-GT-1 (MW-18) | GPEC-GT01S | GPEC-GT01S FILT | GPEC-GT-1S | GPEC-GT-3 | GPEC-GT-XX-102109 | GPEC-GT-3 (MW-16) | GPEC-GT-3(MW-16) | GPEC-GT-4D | GPEC-GT-4D (MW-14D) |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | Sample Date | 10/22/2009 | 12/19/2012 | 11/6/2024 | 3/21/2017 | 3/21/2017 | 11/6/2024 | 10/21/2009 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 10/20/2009 | 12/20/2012 |
| | | | Parent Sample Code | | | | | | | | GPEC-GT-3 | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4 U | 1 U | 1 UH | 1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 4 U | 1 U | 10 UH* | 1 U | NA | 10 UH* | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Hexachloroethane | | 67-72-1 | 5 | 4 U | 1 U | 2 UH | 1 U | NA | 2 UH | 900 U | 830 U | 30 U | 2 U | 4 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | **2.1 J** | **3.14** | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | **4.1 J** | 4 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 4 U | 1 U | 1 UH | 1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 10 U | 1 U | 20 UH | 1 U | NA | 20 UH | 2200 U | 2100 U | 30 U | 20 U | 10 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 4 U | 1 U | 1 UH | 1 U | NA | 1 UH | 900 U | 830 U | 30 U | 1 U | 4 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 25 U | 0.1 U | 20 UH | 0.1 U | NA | 20 UH | 5600 U | 5200 U | 30 U | 20 U | 25 U | 0.1 U |
| Phenol | | 108-95-2 | 1 | **13** | **5.89** | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 4 U | NA | NA | 1 U | NA | NA | 900 U | 830 U | NA | NA | 4 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 UH | NA | NA | 10 UH | NA | NA | NA | 10 U | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 1 U | 10 UH | 1 U | NA | 10 UH | 2200 U | 2100 U | 30 U | 10 U | 10 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 4 U | 1 U | 10 UH | 1 U | NA | 10 UH | 900 U | 830 U | 30 U | 10 U | 4 U | 1 U |
| Total SVOCs | | TSVOC | NE | **15.62** | **9.03** | ND | ND | NA | ND | **10340** | **11340** | **3668.82** | **719.8** | ND | **0.811** |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-GT01 | GPEC-GT01 | GPEC-GT01 | GPEC-GT01S | GPEC-GT01S | GPEC-GT01S | GPEC-GT03 | GPEC-GT03 | GPEC-GT03 | | GPEC-GT04D | GPEC-GT04D |
| | | | Sample Name | GPEC-GT-1 | GPEC-GT-01 | GPEC-GT-1 (MW-18) | GPEC-GT01S | GPEC-GT01S FILT | GPEC-GT-1S | GPEC-GT-3 | GPEC-GT-XX-102109 | GPEC-GT-3 (MW-16) | GPEC-GT-3(MW-16) | GPEC-GT-4D | GPEC-GT-4D (MW-14D) |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate |
| | | | Sample Date | 10/22/2009 | 12/19/2012 | 11/6/2024 | 3/21/2017 | 3/21/2017 | 11/6/2024 | 10/21/2009 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 10/20/2009 | 12/20/2012 |
| | | | Parent Sample Code | | | | | | | | GPEC-GT-3 | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | 0.53 U | 0.52 U | 0.05 U | 0.4 U | 0.54 U | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | NA | NA | 0.05 U | 0.4 U | NA | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U | NA | NA | 0.05 U | 0.4 U | NA | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | NA | 0.05 U | ND | 0.05 U | NA | ND | ND | ND | 0.05 U | ND | ND | 0.05 U |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | **30.2 J** | NA | NA | **706** | NA | NA | NA | 40 U | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | 2 U | NA | NA | **1.4 J** | NA | NA | NA | **2.4** | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | **4.5** | NA | NA | **80.2** | NA | NA | NA | **132** | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | **1610** | NA | NA | **201** | NA | NA | NA | **147** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | NA | 0.8 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | NA | **0.48 J** | NA | NA | NA | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | **319000** | NA | NA | **85600** | NA | NA | NA | **71000** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | 4 U | NA | NA | **3.9 J** | NA | NA | NA | 4 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | 4 U | NA | NA | **1.6 J** | NA | NA | NA | **1.7 J** | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | 4 U | NA | NA | **37.5** | NA | NA | NA | 4 U | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | **268** | NA | NA | **5750** | NA | NA | NA | **1340** | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | **96.8** | NA | NA | **3270** | NA | NA | NA | 1.2 U | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **739000** | NA | NA | **12900** | NA | NA | NA | **12000** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | **168** | NA | NA | **434** | NA | NA | NA | **551** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | **0.14 J** | NA | NA | 0.2 U | NA | NA | NA | 0.2 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | 4 U | NA | NA | **5** | NA | NA | NA | **7.2** | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | **177000** | NA | NA | **3850** | NA | NA | NA | **4510** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | **0.49 J** | NA | NA | 2.5 U | NA | NA | NA | 2.5 U | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | NA | 2 U | NA | NA | NA | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **6580000** | NA | NA | **42600** | NA | NA | NA | **44000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | NA | 0.8 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | **2.3 J** | NA | NA | **9.5** | NA | NA | NA | 4 U | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | **14.6 J** | NA | NA | **316** | NA | NA | NA | 16 U | NA | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **1930** | 400 U | **364** | **254** | NA | **3140** | **94.5 J** | **80.4 J** | 40 U | NA | **504** | **153** |
| Antimony | | 7440-36-0 | 3 | 75 U | 40 U | 2 U | **1.29 J** | NA | **2.8** | 15 UJ | 15 UJ | 4 U | NA | 15 U | 4 U |
| Arsenic | | 7440-38-2 | 25 | 75 U | 20 U | **1.6 J** | **175** | NA | **74.8** | **562** | **565** | **522** | NA | 15 U | **2.65** |
| Barium | | 7440-39-3 | 1000 | **1010** | **1660** | **2020** | **145** | NA | **211** | **352** | **343** | **257** | NA | **111** | **122** |
| Beryllium | | 7440-41-7 | 3* | 25 U | 20 U | 0.8 U | 2 U | NA | **0.13 J** | 5 UJ | 5 UJ | 2 U | NA | 5 U | 2 U |
| Cadmium | | 7440-43-9 | 5 | 25 U | 20 U | 2 U | 2 U | NA | 2 U | 5 UJ | 5 UJ | 2 U | NA | 5 U | 2 U |
| Calcium | | 7440-70-2 | NE | **298000** | **380000** | **347000** | **63300** | NA | **83000** | **214000** | **206000** | **125000** | NA | **114000** | **105000** |
| Chromium | | 7440-47-3 | 50 | 25 U | 80 U | **3.3 J** | 2 U | NA | **11.3** | 5 U | 5 U | 8 U | NA | 5 U | 8 U |
| Chromium (VI) | | 18540-29-9 | NE | **4 J** | NA | **NA** | NA | NA | **NA** | 10 U | **4 J** | NA | NA | 10 U | NA |
| Cobalt | | 7440-48-4 | NE | 25 U | 80 U | **0.5 J** | **0.733 J** | NA | **2 J** | **0.78 J** | **0.77 J** | 8 U | NA | **1.7 J** | 8 U |
| Copper | | 7440-50-8 | 200 | **16.8 J** | 80 U | **3.4 J** | **7.78** | NA | **46.2** | **1.8 J** | **1.8 J** | 8 U | NA | **2.7 J** | 8 U |
| Iron | | 7439-89-6 | 300 | **6310** | **2500** | **4880** | **2230** | **71** | **6610** | **10400** | **10200** | **12100** | NA | **2580** | **4320** |
| Lead | | 7439-92-1 | 25 | 75 U | 20 U | **2.1** | **283** | NA | **1680** | 15 UJ | 15 UJ | **2.54** | NA | 15 U | **5.6** |
| Magnesium | | 7439-95-4 | 35000* | **691000** | **560000** | **886000** | **7580** | NA | **11800** | **27900** | **27400** | **17500** | NA | **48400** | **36800** |
| Manganese | | 7439-96-5 | 300 | **240** | **123** | **181** | **341** | NA | **422** | **2850** | **2820** | **1630** | NA | **1290** | **905** |
| Mercury | | 7439-97-6 | 0.7 | 0.4 U | 0.5 U | 0.2 U | 0.5 U | NA | **6.1** | 0.4 U | 0.4 U | 0.5 U | NA | 0.4 U | 0.5 U |
| Nickel | | 7440-02-0 | 100 | 25 U | 40 U | **2.7 J** | **2.43** | NA | **8.5** | 5 UJ | 5 UJ | **1.62** | NA | **2.7 J** | **1.93 J** |
| Potassium | | 7440-09-7 | NE | **343000** | **163000** | **184000** | **6830** | NA | **3580** | **13900** | **13500** | **8510** | NA | **16700** | **10100** |
| Selenium | | 7782-49-2 | 10 | 190 UJ | 80 U | 2.5 U | 2 U | NA | **0.54 J** | 38 UJ | 38 UJ | 8 U | NA | 38 U | 8 U |
| Silver | | 7440-22-4 | 50 | 25 U | 20 U | 2 U | 2 U | NA | 2 U | 5 UJ | 5 UJ | 2 U | NA | 5 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **6240000** | **5200000** | **7360000** | **36800** | NA | **19100** | **158000** | **153000** | **86700** | NA | **117000** | **105000** |
| Thallium | | 7440-28-0 | 0.5* | 75 UJ | 20 U | 0.8 U | 2 U | NA | 0.8 U | 15 UJ | 15 UJ | 2 U | NA | 15 UJ | 2 U |
| Vanadium | | 7440-62-2 | NE | **31.9** | 80 U | **4.4** | **2.21** | NA | **10.2** | **3.2 J** | **3 J** | 8 U | NA | **4.1 J** | 8 U |
| Zinc | | 7440-66-6 | 2000* | 125 U | 80 U | **8.1 J** | **79.4** | NA | **221** | 25 U | 25 U | **6.06** | NA | **7.6 J** | **69.6** |
| **Cyanides** | µg/L | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 10 U | 2 U | NA | 5 U | NA | NA | 10 U | 10 U | 2 U | NA | 10 U | 2 U |
| Total Cyanide | | 57-12-5 | 200 | 10 U | 20 U | NA | **10 J** | NA | NA | 10 U | 10 U | 20 U | NA | **34.7** | 20 U |
| **Other** | µg/L | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | 500 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | **47800** | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-GT04D | GPEC-GT04D | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT05 | GPEC-GT05 | GPEC-GT05 | GPEC-GT5I | GPEC-GT5I | GPEC-GT5I |
| | | | Sample Name | GPECXX122012 | GPEC-GT-4D(MW-14D) | GPEC-GT-4S | GPEC-GT-4S (MW-14S) | GPEC-GT-4S(MW-14S) | DUP-04 | GPEC-GT-5 | GPEC-GT-5 (MW-15) | GPEC-GT-5(MW-15) | GPEC-GT5I | GPEC-GT 5I FILT | GPEC-GT5I |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/20/2012 | 11/21/2024 | 10/20/2009 | 12/20/2012 | 11/21/2024 | 11/21/2024 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 3/21/2017 | 3/21/2017 | 11/11/2024 |
| | | | Parent Sample Code | GPEC-GT-4D (MW-14D) | | | | | GPEC-GT-4S(MW-14S) | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **2.01** | 1 U | **1900** | **170000** | **41000** | **40000** | **450000** | **266000** | **71000** | **4280 D** | NA | **20** |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | **5100 J** | **1400** | 250 U | 10 U | NA | **0.97 J** |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | **26 J** | 1000 U | 100 U | 100 U | 20000 U | **2590** | **540** | **40 D** | NA | **0.94 J** |
| o-Xylene | | 95-47-6 | 5 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | **0.46 J** |
| m/p-Xylene | | 179601-23-1 | 5 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | **120 J** | NA | NA | **1** |
| Total Xylene | | 1330-20-7 | 5 | 2 U | NA | 50 U | 2000 U | NA | NA | 20000 U | 5000 U | NA | **19.7 DJ** | NA | NA |
| Total BTEX | | TBTEX | NE | **2.01** | ND | **1926** | **170000** | **41000** | **40000** | **455100** | **269990** | **71660** | **4340** | NA | **23.37** |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 2 U | 5 U | 100 U | 2000 U | 500 U | 500 U | 40000 U | 12500 U | 1300 U | 40 U | NA | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | NA | NA | 20000 U | NA | NA | NA | 50000 U | NA | 400 U | NA | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | NA | NA | 20000 U | NA | NA | NA | 50000 U | NA | 200 U | NA | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 40 U | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 50 UJ | 1000 U | 100 U | 100 U | 20000 UJ | 2500 U | 250 U | 20 U | NA | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | NA | NA | 1000 U | NA | NA | NA | 2500 U | NA | 20 U | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 50 UJ | 1000 U | 100 U | 100 U | 20000 UJ | 2500 U | 250 U | 10 U | NA | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | **3.1** |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | NA | 1000 U | 100 U | 100 U | NA | 2500 U | 250 U | 20 U | NA | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | **0.909 J** | **1.2** | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **4.62** | **12** | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | **1.86** | **1.1** | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | NA | 1000 U | NA | NA | NA | 2500 U | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 5000 U | 250 U | 10 U | NA | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | NA | NA | 1000 U | NA | NA | NA | 2500 U | NA | 10 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 1 U | 5 U | 100 U | 1000 U | 500 U | 500 U | 40000 U | 5000 U | 1300 U | 20 U | NA | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | **5.2** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | **1.6** | NA | 1000 U | 100 U | 100 U | NA | 2500 U | 250 U | 10 U | NA | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | **1.23** | 5 U | 100 U | 1000 U | 500 U | 500 U | 40000 U | 2500 U | 1300 U | 20 U | NA | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 1 U | 50 U | 2000 U | 100 U | 100 U | 20000 U | 5000 U | 250 U | 20 U | NA | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | 5 U | NA | NA | 500 U | 500 U | NA | NA | 1300 U | NA | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | **1.6** |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 5 U | 100 U | 1000 U | 500 U | 500 U | 40000 U | 2500 U | 1300 U | 40 U | NA | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **1.25** | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | NA | 1000 U | 100 U | 100 U | NA | 2500 U | 250 U | 20 U | NA | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | 1 U | NA | NA | 100 U | 100 U | NA | NA | 250 U | NA | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | NA | 1000 U | 100 U | 100 U | NA | 2500 U | 250 U | 20 U | NA | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-GT04D | GPEC-GT04D | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT05 | GPEC-GT05 | GPEC-GT05 | GPEC-GT5I | GPEC-GT5I | GPEC-GT5I |
| | | | Sample Name | GPECXX122012 | GPEC-GT-4D(MW-14D) | GPEC-GT-4S | GPEC-GT-4S (MW-14S) | GPEC-GT-4S(MW-14S) | DUP-04 | GPEC-GT-5 | GPEC-GT-5 (MW-15) | GPEC-GT-5(MW-15) | GPEC-GT5I | GPEC-GT 5I FILT | GPEC-GT5I |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/20/2012 | 11/21/2024 | 10/20/2009 | 12/20/2012 | 11/21/2024 | 11/21/2024 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 3/21/2017 | 3/21/2017 | 11/11/2024 |
| | | | Parent Sample Code | GPEC-GT-4D (MW-14D) | | | | | GPEC-GT-4S(MW-14S) | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **8.78** | **2.3** | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 10 U | NA | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | NA | 1000 U | 100 U | 100 U | NA | 2500 U | 250 U | 20 U | NA | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | NA | NA | 1000 U | NA | NA | NA | 2500 U | NA | 10 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | NA | NA | 1000 U | NA | NA | NA | 2500 U | NA | 20 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 50 U | 1000 U | 100 U | 100 U | 20000 U | 2500 U | 250 U | 20 U | NA | 1 U |
| Total VOCs | | TVOC | NE | **20.659** | **18.2** | **1926** | **170000** | **41000** | **40000** | **455100** | **269990** | **71660** | **4340** | NA | **33.27** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 10 U | 4 U | **0.924 J** | **1.9** | **1.4** | **75 J** | **24.1** | **53** | **0.916 J** | NA | **8.2 J** |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | **1.4 J** | 1 U | NA | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | **0.23 J** | NA | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | **5.48** | **14** | **0.381 J** | NA | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 10 U | 4 U | **0.312 J** | 10 U | 10 U | **230 J** | **57.5** | **190** | **0.303 J** | NA | **2.5 J** |
| Naphthalene | | 91-20-3 | 10* | **0.314 J** | 2 U | **6.2** | **50.3** | **11** | **8.1** | **4600** | **1190** | **4100** | **42** | NA | **11** |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 10 U | 4 U | **0.396 J** | 10 U | 10 U | 400 U | **5.82** | **9.1 J** | **0.915 J** | NA | 10 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U | 400 U | 0.1 U | 1 U | 0.1 U | NA | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U | 400 U | 0.1 U | 1 U | 0.1 U | NA | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 2 U | 400 U | 0.1 U | 2 U | 0.1 U | NA | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U | 400 U | 0.1 U | 1 U | 0.1 U | NA | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U | 400 U | 10 U | 2 U | 1 U | NA | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 1 U | 400 U | 0.1 U | 1 U | 0.1 U | NA | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 2 U | 400 U | 0.1 U | 2 U | 0.1 U | NA | 2 U |
| Total PAHs | | TPAH | NE | **0.314** | ND | **6.2** | **51.932** | **12.9** | **9.5** | **4905** | **1282.9** | **4367.5** | **44.74** | NA | **21.7** |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | 10 U | NA | NA | 10 U | 10 U | *NA* | *NA* | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | 2 U | NA | NA | 2 U | 2 U | NA | NA | 2 U* | NA | NA | 2 U* |
| Benzaldehyde | | 100-52-7 | NE | NA | 10 U | NA | NA | 10 U | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | 4 U | NA | NA | NA | 400 U | NA | NA | 1 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | 10 U | NA | NA | 10 U | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 400 U | 10 U | 1 U | 1 U | NA | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 UJ | 10 U | 10 U | 1 U | NA | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U | 400 U | 10 U | 2 U | 1 U | NA | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | 10 U | NA | NA | 10 U | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | **6.92** | **15** | **0.348 J** | NA | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 10 U | 5 U | 1 U | 10 U | 10 U | 500 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | **6.11** | **16** | **0.19 J** | NA | **1.5 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | 4 U | NA | NA | NA | 400 U | NA | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | 4 U | NA | NA | NA | 400 U | NA | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 4 U | NA | NA | NA | 400 U | NA | NA | 1 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | **1 J** | 1 U | NA | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 20 U | 25 U | 1 U | 20 U | 20 U | 2500 U | 10 U | 20 U | 10 U | NA | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 40 U | 25 U | 1 U | 40 U | 40 U | 2500 U | 10 U | 40 U | 1 U | NA | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 10 U | NA | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U | 400 U | 10 U | 2 U | 1 U | NA | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 1 U | 4 U | 0.02 U | 1 U | 1 U | 400 U | 0.02 U | 1 U | 0.02 U | NA | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-GT04D | GPEC-GT04D | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT05 | GPEC-GT05 | GPEC-GT05 | GPEC-GT5I | GPEC-GT5I | GPEC-GT5I |
| | | | Sample Name | GPECXX122012 | GPEC-GT-4D(MW-14D) | GPEC-GT-4S | GPEC-GT-4S (MW-14S) | GPEC-GT-4S(MW-14S) | DUP-04 | GPEC-GT-5 | GPEC-GT-5 (MW-15) | GPEC-GT-5(MW-15) | GPEC-GT5I | GPEC-GT 5I FILT | GPEC-GT5I |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/20/2012 | 11/21/2024 | 10/20/2009 | 12/20/2012 | 11/21/2024 | 11/21/2024 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 3/21/2017 | 3/21/2017 | 11/11/2024 |
| | | | Parent Sample Code | GPEC-GT-4D (MW-14D) | | | | | GPEC-GT-4S(MW-14S) | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 400 U | 10 U | 1 U | 1 U | NA | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 2 U | 4 U | 1 U | 2 U | 2 U | 400 U | 10 U | 2 U | 1 U | NA | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 10 U | 4 U | **0.44 J** | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 400 U | 10 U | 1 U | 1 U | NA | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 20 U | 10 U | 1 U | 20 U | 20 U | 1000 U | 10 U | 20 U | 1 U | NA | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 400 U | 10 U | 1 U | 1 U | NA | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 20 U | 25 U | 0.1 U | 20 U | 20 U | 2500 U | 0.1 U | 20 U | 0.1 U | NA | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 10 U | **2.6 J** | **21.4** | **290** | **220** | **68 J** | **35.2** | **54** | **4.18** | NA | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 4 U | NA | NA | NA | 400 U | NA | NA | 1 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | 10 U | NA | NA | 10 U | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | 10 U | NA | NA | 10 U | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 10 U | 10 U | 1 U | 10 U | 10 U | 1000 U | 10 U | 10 U | 1 U | NA | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 10 U | 4 U | 1 U | 10 U | 10 U | 400 U | 10 U | 10 U | 1 U | NA | 10 U |
| Total SVOCs | | TSVOC | NE | **0.314** | ND | **8.8** | **73.772** | **302.9** | **229.5** | **4973** | **1331.13** | **4453.5** | **49.458** | NA | **23.2** |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | 89.3 U | NA | NA | 125 U | 139 U | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | 89.3 U | NA | NA | 125 U | 139 U | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | 17.9 U* | NA | NA | 25 U* | 27.8 U* | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | 3.57 U* | NA | NA | 5 U* | 5.56 U* | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | 35.7 U* | NA | NA | 50 U* | 55.6 U* | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | 3.57 U* | NA | NA | 5 U* | 5.56 U* | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | 35.7 U | NA | NA | 50 U | 55.6 U | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | 7.14 U | NA | NA | 10 U | 11.1 U | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | 7.14 U | NA | NA | 10 U | 11.1 U | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | 7.14 U | NA | NA | 10 U | 11.1 U | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | 7.14 U | NA | NA | 10 U | 11.1 U | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | **1.99 J** | NA | NA | **3.94 J** | **4.39 J** | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | **13.1 J** | NA | NA | **13.1 J** | **13 J** | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | **21.3** | NA | NA | **10.6** | **10.6** | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | **12.6** | NA | NA | **12.5** | **12.4** | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | 3.57 U | NA | NA | 5 U | **3.99 J** | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | **11** | NA | NA | **20.4** | **18.6** | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | 3.57 U | NA | NA | 5 U | 5.56 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | 14.3 U | NA | NA | 20 U | 22.2 U | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | **4.34** | NA | NA | **1.7 J** | **1.83 J** | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | **7.9** | NA | NA | **4.4 J** | **4.44 J** | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | **7.23** | NA | NA | **10.5** | **10.7** | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | **91.7** | NA | NA | **89.3** | **89.2** | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI | Phase 1 | Supplemental | Supplemental Inv. | Supplemental Inv. | Supplemental |
| | | | Location Name | GPEC-GT04D | GPEC-GT04D | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT04S | GPEC-GT05 | GPEC-GT05 | GPEC-GT05 | GPEC-GT5I | GPEC-GT5I | GPEC-GT5I |
| | | | Sample Name | GPECXX122012 | GPEC-GT-4D(MW-14D) | GPEC-GT-4S | GPEC-GT-4S (MW-14S) | GPEC-GT-4S(MW-14S) | DUP-04 | GPEC-GT-5 | GPEC-GT-5 (MW-15) | GPEC-GT-5(MW-15) | GPEC-GT5I | GPEC-GT 5I FILT | GPEC-GT5I |
| | | | Screen Zone | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/20/2012 | 11/21/2024 | 10/20/2009 | 12/20/2012 | 11/21/2024 | 11/21/2024 | 10/21/2009 | 12/20/2012 | 11/11/2024 | 3/21/2017 | 3/21/2017 | 11/11/2024 |
| | | | Parent Sample Code | GPEC-GT-4D (MW-14D) | | | | | GPEC-GT-4S(MW-14S) | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 UJ | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U | 0.4 U | 0.5 UJ | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 U | NA | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | ND | 0.05 U | ND | ND | ND | 0.05 U | ND | 0.05 U | NA | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | 40 U | NA | NA | 40 U | 40 U | NA | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | NA | NA | 2 U | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | 2 U | NA | NA | 2 U | 2 U | NA | NA | **1.9 J** | NA | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | **188** | NA | NA | **1050** | **1050** | NA | NA | **1300** | NA | NA | **189** |
| Beryllium | | 7440-41-7 | 3* | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | NA | NA | 2 U | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **127000** | NA | NA | **343000** | **347000** | NA | NA | **317000** | NA | NA | **102000** |
| Chromium | | 7440-47-3 | 50 | NA | 4 U | NA | NA | 4 U | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | **1.1** | NA | NA | **0.78** | **0.93** | NA | NA | **0.58 J** | NA | NA | 4 U |
| Copper | | 7440-50-8 | 200 | NA | 4 U | NA | NA | 4 U | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | 120 U | NA | NA | **313** | **167** | NA | NA | **37700** | NA | NA | **1110** |
| Lead | | 7439-92-1 | 25 | NA | 1.2 U | NA | NA | 1.2 U | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **46900** | NA | NA | **132000** | **129000** | NA | NA | **108000** | NA | NA | **55100** |
| Manganese | | 7439-96-5 | 300 | NA | **1120** | NA | NA | **5270** | **5100** | NA | NA | **2180** | NA | NA | **1300** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | NA | NA | 0.2 U | 0.2 U | NA | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | 4 U | NA | NA | 4 U | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | **12800** | NA | NA | **38300** | **37800** | NA | NA | **58800** | NA | NA | **29800** |
| Selenium | | 7782-49-2 | 10 | NA | 2.5 U | NA | NA | **0.43** | 2.5 U | NA | NA | 2.5 U | NA | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | NA | 2 U | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **167000** | NA | NA | **1580000** | **1680000** | NA | NA | **2220000** | NA | NA | **645000** |
| Thallium | | 7440-28-0 | 0.5* | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | 4 U | NA | NA | 4 U | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | 16 U | NA | NA | 16 U | 16 U | NA | NA | 16 U | NA | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **96.9** | NA | 500 U | 40 U | NA | NA | **299** | 40 U | NA | **112** | NA | NA |
| Antimony | | 7440-36-0 | 3 | 4 U | NA | 15 U | 4 U | NA | NA | 15 UJ | 4 U | NA | 2 U | NA | NA |
| Arsenic | | 7440-38-2 | 25 | **2.61** | NA | 15 U | 2 U | NA | NA | **11.8** | **9.37** | NA | 2 U | NA | NA |
| Barium | | 7440-39-3 | 1000 | **103** | NA | **209** | **198** | NA | NA | **501** | **713** | NA | **61.6** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | NA | 5 U | 2 U | NA | NA | 5 UJ | 2 U | NA | 2 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 5 U | 2 U | NA | NA | 5 UJ | 2 U | NA | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | **99300** | NA | **149000** | **181000** | NA | NA | **200000** | **214000** | NA | **78900** | NA | NA |
| Chromium | | 7440-47-3 | 50 | 8 U | NA | 5 U | 8 U | NA | NA | 5 U | 8 U | NA | 2 U | NA | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | 10 U | NA | NA | NA | **7.7 J** | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | 8 U | NA | 5 U | 8 U | NA | NA | 5 U | 8 U | NA | 2 U | NA | NA |
| Copper | | 7440-50-8 | 200 | 8 U | NA | **3.4 J** | **87** | NA | NA | **3.2 J** | 8 U | NA | **2.71** | NA | NA |
| Iron | | 7439-89-6 | 300 | **4010** | NA | **2750** | **5290** | NA | NA | **50300** | **58000** | NA | **4880** | **306** | NA |
| Lead | | 7439-92-1 | 25 | **3.05** | NA | 15 U | **0.693 J** | NA | NA | 15 UJ | **1.52** | NA | **0.81 J** | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | **34900** | NA | **56900** | **55100** | NA | NA | **85200** | **79700** | NA | **50500** | NA | NA |
| Manganese | | 7439-96-5 | 300 | **844** | NA | **1820** | **2910** | NA | NA | **2040** | **2930** | NA | **2100** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | NA | 0.4 U | 0.5 U | NA | NA | 0.4 U | 0.5 U | NA | 0.5 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | **1.72 J** | NA | 5 U | 4 U | NA | NA | 5 UJ | 4 U | NA | **1.06 J** | NA | NA |
| Potassium | | 7440-09-7 | NE | **9670** | NA | **141000** | **34800** | NA | NA | **51700** | **27800** | NA | **18900** | NA | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | NA | 38 U | 8 U | NA | NA | 38 UJ | 8 U | NA | 2 U | NA | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 5 U | 2 U | NA | NA | 5 UJ | 2 U | NA | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | **102000** | NA | **432000** | **464000** | NA | NA | **591000** | **786000** | NA | **266000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | NA | 15 UJ | 2 U | NA | NA | 15 UJ | 2 U | NA | 2 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | 8 U | NA | **74.9** | **10.9** | NA | NA | **5.9 J** | 8 U | NA | **2.07** | NA | NA |
| Zinc | | 7440-66-6 | 2000* | **45.9** | NA | 25 U | **7.7 J** | NA | NA | 25 U | 8 U | NA | **12.1** | NA | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | NA | 10 U | 2 U | NA | NA | 10 U | 2 U | NA | 5 U | NA | NA |
| Total Cyanide | | 57-12-5 | 200 | 20 U | NA | **7.8 J** | 20 U | NA | NA | **12** | 20 U | NA | **21** | NA | NA |
| **Other** | µg/L | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 500 U | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | **53200** | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | Supplemental | PDI |
| | | | Location Name | GPEC-GT5D | GPEC-GT07 | GPEC-GT07 | GPEC-GT07 | GPEC-MW-101I | GPEC-MW101I | GPEC-MW101I | GPEC-MW-101D | GPEC-MW101D | GPEC-MW-101D | GPEC-MW-101D | GPEC-MW-101D | GPEC-MW-101WT |
| | | | Sample Name | GPEC-GT5D | GPEC-GT-7 | GPEC-GT-07 | GPEC-GT-7(MW-19) | GPEC-MW-101(I) | GPEC-MW101I | GPEC-MW-101I | GPEC-MW-101(D) | GPEC-MW101D | GPEC-MW-101D | DUP-02 | GPEC-MW-101(S) | |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep | Deep | Deep | Shallow | |
| | | | Sample Date | 11/11/2024 | 10/22/2009 | 12/18/2012 | 11/11/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 11/12/2024 | 9/1/2010 | |
| | | | Parent Sample Code | | | | | | | | | | | GPEC-MW-101D | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **0.24 J** | 5 U | 1 U | **0.25 J** | **0.77 J** | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Toluene | | 108-88-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| Total Xylene | | 1330-20-7 | 5 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA | 5 U | |
| Total BTEX | | TBTEX | NE | **0.24** | ND | ND | **0.25** | **0.77** | ND | ND | ND | ND | ND | ND | ND | |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 UJ | 5 U | 5 U | 10 UJ | 5 U | 5 UJ | 10 UJ | 5 U | 5 UJ | 5 UJ | 10 U | |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | 20 U | NA | NA | R | NA | NA | R | NA | NA | NA | |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | 20 U | NA | NA | 20 U | NA | NA | 20 U | NA | NA | NA | |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Bromoform | | 75-25-2 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 1 U | 1 U | 5 U | **2.74** | 1 U | **2.2 J** | 1 U | 1 U | 1 U | 5 U | |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 UJ | 5 U | 1 U | 1 UJ | 1 UJ | 5 U | |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | |
| Chloroform | | 67-66-3 | 7 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | **0.75 J** | |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | 1 U | NA | NA | **0.3 J** | NA | NA | 1 U | 1 U | NA | |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 UJ | NA | 1 U | 1 UJ | 1 UJ | NA | |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | **2 J** | **5.07** | **2.1** | **2.2 J** | **1.15** | **0.63 J** | 5 U | 1 U | 1 U | 1 U | **1.4 J** | |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 5 U | 1 U | 1 U | **7** | **2.72** | **0.94 J** | 5 U | 1 U | 1 U | 1 U | 5 U | |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | **4.8 J** | **5.29** | **0.98 J** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 5 U | **0.458 J** | **0.29 J** | **2.7 J** | **1.72** | **0.46 J** | 5 U | 1 U | 1 U | 1 U | 5 U | |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 1 U | 1 U | **2.4 J** | **1.11** | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 1 U | 5 U | |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 10 UJ | 2 U | 5 U | 10 UJ | 2 U | 5 UJ | 10 UJ | 2 U | 5 UJ | 5 UJ | 10 U | |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | 1 U | **0.26 J** | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | NA | |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 UJ | 10 U | 1 U | 5 UJ | 5 UJ | 10 U | |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 5 U | 2 U | 1 U | 5 UJ | 2 U | 1 U | 5 UJ | 2 U | 1 U | 1 U | 5 UJ | |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | 5 U | NA | NA | 5 U | NA | NA | 5 U | 5 U | NA | |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 10 UJ | 1 U | 5 U | 10 U | 1 U | 5 UJ | 10 U | 1 U | 5 UJ | 5 UJ | 10 U | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 5 U | 1 U | 1 U | **2.3 J** | **0.584 J** | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | NA | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | 1 U | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | NA | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | **3.4 J** | |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI |
| | | | Location Name | GPEC-GT5D | GPEC-GT07 | GPEC-GT07 | GPEC-GT07 | GPEC-MW-101I | GPEC-MW101I | GPEC-MW101I | GPEC-MW-101D | GPEC-MW101D | GPEC-MW-101D | GPEC-MW-101D | GPEC-MW-101WT |
| | | | Sample Name | GPEC-GT5D | GPEC-GT-7 | GPEC-GT-07 | GPEC-GT-7(MW-19) | GPEC-MW-101(I) | GPEC-MW101I | GPEC-MW-101I | GPEC-MW-101(D) | GPEC-MW101D | GPEC-MW-101D | DUP-02 | GPEC-MW-101(S) |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep | Deep | Deep | Shallow |
| | | | Sample Date | 11/11/2024 | 10/22/2009 | 12/18/2012 | 11/11/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 11/12/2024 | 9/1/2010 |
| | | | Parent Sample Code | | | | | | | | | | | GPEC-MW-101D | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 5 U | 1 U | 1 U | **3.5 J** | **1.56** | **0.34 J** | 5 U | 1 U | 1 U | 1 U | 5 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | NA |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 1 U | 5 U |
| Total VOCs | | TVOC | NE | **0.24** | **6.8** | **10.818** | **3.88** | **20.87** | **11.584** | **2.67** | **2.2** | ND | ND | ND | **5.55** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 4 U | 1 U | **0.7 J** | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 2 U | 4.4 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 4 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 1 U | 4.4 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 4 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 1 U | 4.4 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 4 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U | 2 U | 4.4 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 4 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 1 U | 4.4 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 4 U | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 2 U | 4.4 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 4 U | 0.1 U | 1 U | 4.3 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 1 U | 4.4 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 4 U | 0.1 U | 2 U | 4.3 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U | 2 U | 4.4 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | **0.7** | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U* | NA | NA | 2 U* | NA | NA | 2 U | NA | NA | 2 U | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 UJ | NA | NA | 10 UJ | 10 UJ | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4 U | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA | NA | 4.4 U |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4 U | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 1 U | 4.4 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 4 U | 1 U | 2 U | 4.3 U | 1 U | 2 U | **1.3 J** | 1 U | 2 U | 2 U | 4.4 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 5 U | 1 U | 10 U | 5.4 U | 1 U | 10 U | 5.5 U | 1 U | 10 U | 10 U | 5.5 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 4 U | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA | NA | 4.4 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4 U | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA | NA | 4.4 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 4 U | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA | NA | 4.4 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | **0.67 J** | 1 U | 10 U | 10 U | 4.4 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 25 U | 1 U | 20 U | 27 U | 1 U | 20 U | 27 U | 1 U | 20 U | 20 U | 27 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 25 U | 1 U | 40 U | 27 U | 1 U | 40 U | 27 U | 1 U | 40 U | 40 U | 27 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 4 U | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 2 U | 4.4 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 4 U | 0.02 U | 1 U | 4.3 U | 0.02 U | 1 U | 4.4 U | 0.02 U | 1 U | 1 U | 4.4 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI |
| | | | Location Name | GPEC-GT5D | GPEC-GT07 | GPEC-GT07 | GPEC-GT07 | GPEC-MW-101I | GPEC-MW101I | GPEC-MW101I | GPEC-MW-101D | GPEC-MW101D | GPEC-MW-101D | GPEC-MW-101D | GPEC-MW-101WT |
| | | | Sample Name | GPEC-GT5D | GPEC-GT-7 | GPEC-GT-07 | GPEC-GT-7(MW-19) | GPEC-MW-101(I) | GPEC-MW101I | GPEC-MW-101I | GPEC-MW-101(D) | GPEC-MW101D | GPEC-MW-101D | DUP-02 | GPEC-MW-101(S) |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep | Deep | Deep | Shallow |
| | | | Sample Date | 11/11/2024 | 10/22/2009 | 12/18/2012 | 11/11/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 11/12/2024 | 9/1/2010 |
| | | | Parent Sample Code | | | | | | | | | | | GPEC-MW-101D | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4 U | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 1 U | 4.4 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 4 U | 1 U | 2 U | 4.3 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 2 U | 4.4 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4 U | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 1 U | 4.4 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 10 U | 1 U | 20 U | 11 U | 1 U | 20 U | 11 U | 1 U | 20 U | 20 U | 11 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4 U | 1 U | 1 U | 4.3 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 1 U | 4.4 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 25 U | 0.1 U | 20 U | 27 U | 0.1 U | 20 U | 27 U | 0.1 U | 20 U | 20 U | 27 U |
| Phenol | | 108-95-2 | 1 | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4 U | NA | NA | 4.3 U | NA | NA | 4.4 U | NA | NA | NA | 4.4 U |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 10 U | 1 U | 10 U | 11 U | 1 U | 10 U | 11 U | 1 U | 10 U | 10 U | 11 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 4 U | 1 U | 10 U | 4.3 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 10 U | 4.4 U |
| Total SVOCs | | TSVOC | NE | ND | ND | ND | **0.7** | ND | ND | ND | **1.97** | ND | ND | ND | ND |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | 39.8 U | NA | NA | 67.9 U | 77.2 U | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | 39.8 U | NA | NA | 67.9 U | 77.2 U | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | 7.96 U | NA | NA | 13.6 U | 15.4 U | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | 15.9 U | NA | NA | 27.2 U | 30.9 U | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | 15.9 U | NA | NA | 27.2 U | 30.9 U | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | 3.18 U | NA | NA | 5.43 U | 6.17 U | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | 3.18 U | NA | NA | 5.43 U | 6.17 U | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | 3.18 U | NA | NA | 5.43 U | 6.17 U | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | 3.18 U | NA | NA | 5.43 U | 6.17 U | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | **2.88** | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | **12.4** | NA | NA | 10.9 U | 12.3 U | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | **0.43 J** | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | **11.6** | NA | NA | **2.04 J** | **2.13 J** | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | **8.66** | NA | NA | **2.72** | **2.45 J** | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | **9.33** | NA | NA | **2.48 J** | **2.32 J** | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | 1.59 U | NA | NA | 2.72 U | 3.09 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | 6.37 U | NA | NA | 10.9 U | 12.3 U | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | **1.13 J** | NA | NA | 2.72 U | 3.09 U | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | **15.6** | NA | NA | **4.32** | **4.98** | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | **10.5** | NA | NA | **0.93 J** | **0.9 J** | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | **33.4** | NA | NA | **10.9** | **10.8** | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Supplemental | PDI |
| | | | Location Name | GPEC-GT5D | GPEC-GT07 | GPEC-GT07 | GPEC-GT07 | GPEC-MW-101I | GPEC-MW101I | GPEC-MW101I | GPEC-MW-101D | GPEC-MW101D | GPEC-MW-101D | GPEC-MW-101D | GPEC-MW-101WT |
| | | | Sample Name | GPEC-GT5D | GPEC-GT-7 | GPEC-GT-07 | GPEC-GT-7(MW-19) | GPEC-MW-101(I) | GPEC-MW101I | GPEC-MW-101I | GPEC-MW-101(D) | GPEC-MW101D | GPEC-MW-101D | DUP-02 | GPEC-MW-101(S) |
| | | | Screen Zone | Deep | Intermediate | Intermediate | Intermediate | Deep | Deep | Deep | Deep | Deep | Deep | Deep | Shallow |
| | | | Sample Date | 11/11/2024 | 10/22/2009 | 12/18/2012 | 11/11/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 9/1/2010 | 12/14/2012 | 11/12/2024 | 11/12/2024 | 9/1/2010 |
| | | | Parent Sample Code | | | | | | | | | | | GPEC-MW-101D | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.56 U | 0.05 U | 0.4 U | 0.4 U | 0.58 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U | NA |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | 0.4 U | NA |
| Total PCBs | | 1336-36-3 | 0.09 | ND | NA | 0.05 U | ND | ND | 0.05 U | ND | ND | 0.05 U | ND | ND | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | 40 U | NA | NA | 40 U | NA | NA | 40 U | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 2 U | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | NA | **1.6 J** | NA | NA | 2 U | NA | NA | 2 U | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **104** | NA | NA | **312** | NA | NA | **137** | NA | NA | **44.1** | **46.5** | NA |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **134000** | NA | NA | **108000** | NA | NA | **159000** | NA | NA | **178000** | **185000** | NA |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | 4 U | NA | NA | 4 U | NA | NA | **2 J** | NA | NA | **3.2 J** | **3.2 J** | NA |
| Copper | | 7440-50-8 | 200 | 4 U | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U | 4 U | NA |
| Iron | | 7439-89-6 | 300 | **1180** | NA | NA | 120 U | NA | NA | 120 U | NA | NA | **37.6 J** | 120 U | NA |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **34800** | NA | NA | **37500** | NA | NA | **62000** | NA | NA | **243000** | **243000** | NA |
| Manganese | | 7439-96-5 | 300 | **389** | NA | NA | **1590** | NA | NA | **2490** | NA | NA | **738** | **868** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | 0.2 U | NA | NA | 0.2 U | NA | NA | 0.2 U | **0.096 J** | NA |
| Nickel | | 7440-02-0 | 100 | 4 U | NA | NA | 4 U | NA | NA | **2 J** | NA | NA | 4 U | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **9770** | NA | NA | **18100** | NA | NA | **16400** | NA | NA | **70500** | **70800** | NA |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | 2.5 U | NA | NA | 2.5 U | NA | NA | **1.2 J** | 2.5 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **268000** | NA | NA | **435000** | NA | NA | **466000** | NA | NA | **2600000** | **2560000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U | 4 U | NA |
| Zinc | | 7440-66-6 | 2000* | **5.9 J** | NA | NA | 16 U | NA | NA | 16 U | NA | NA | 16 U | 16 U | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **83.7 J** | **210** | NA | **149 J** | **82** | NA | **1480** | **117** | NA | NA | 250 U |
| Antimony | | 7440-36-0 | 3 | NA | 15 U | 4 U | NA | 15 U | 4 U | NA | 15 U | 4 U | NA | NA | 15 U |
| Arsenic | | 7440-38-2 | 25 | NA | **4 J** | **2.48** | NA | 15 U | **1.03 J** | NA | 15 U | **1.28 J** | NA | NA | **5.4 J** |
| Barium | | 7440-39-3 | 1000 | NA | **290** | **301** | NA | **141** | **89.8** | NA | **94.2** | **61.8** | NA | NA | **176** |
| Beryllium | | 7440-41-7 | 3* | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA | 5 U |
| Cadmium | | 7440-43-9 | 5 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA | 5 U |
| Calcium | | 7440-70-2 | NE | NA | **99000** | **92300** | NA | **127000** | **105000** | NA | **159000** | **140000** | NA | NA | **85500** |
| Chromium | | 7440-47-3 | 50 | NA | 5 U | 8 U | NA | **0.7 J** | 8 U | NA | **5.8** | 8 U | NA | NA | **0.61 J** |
| Chromium (VI) | | 18540-29-9 | NE | NA | 10 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | 5 U | 8 U | NA | **0.75 J** | 8 U | NA | **1.6 J** | 8 U | NA | NA | **0.99 J** |
| Copper | | 7440-50-8 | 200 | NA | 10 U | 8 U | NA | 10 U | 8 U | NA | **9.2 J** | 8 U | NA | NA | **5.7 J** |
| Iron | | 7439-89-6 | 300 | NA | **4700** | **5760** | NA | **4380** | **5380** | NA | **4010** | **2770** | NA | NA | **561** |
| Lead | | 7439-92-1 | 25 | NA | 15 U | **5.3** | NA | 15 U | **0.939 J** | NA | 15 U | **3.62** | NA | NA | 15 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **35000** | **34500** | NA | **93400** | **80000** | NA | **253000** | **231000** | NA | NA | **7650** |
| Manganese | | 7439-96-5 | 300 | NA | **1550** | **1360** | NA | **2470** | **1900** | NA | **614** | **661** | NA | NA | **494** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.4 U | 0.5 U | NA | 0.4 U | 0.5 U | NA | 0.4 U | 0.5 U | NA | NA | 0.4 U |
| Nickel | | 7440-02-0 | 100 | NA | 5 U | **1.12 J** | NA | **1.5 J** | **1.13 J** | NA | **3.3 J** | 4 U | NA | NA | **3.5 J** |
| Potassium | | 7440-09-7 | NE | NA | **20000** | **15700** | NA | **12400** | **12200** | NA | **91500** | **65600** | NA | NA | **13600** |
| Selenium | | 7782-49-2 | 10 | NA | 38 UJ | 8 U | NA | 38 U | 8 U | NA | 38 U | 8 U | NA | NA | 38 U |
| Silver | | 7440-22-4 | 50 | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | 5 U | 2 U | NA | NA | 5 U |
| Sodium | | 7440-23-5 | 20000 | NA | **266000** | **267000** | NA | **161000** | **198000** | NA | **2410000** | **2150000** | NA | NA | **549000** |
| Thallium | | 7440-28-0 | 0.5* | NA | 15 UJ | 2 U | NA | 15 U | 2 U | NA | 15 UJ | 2 U | NA | NA | 15 U |
| Vanadium | | 7440-62-2 | NE | NA | **3.8 J** | 8 U | NA | **3.2 J** | 8 U | NA | **5.5** | 8 U | NA | NA | **4 J** |
| Zinc | | 7440-66-6 | 2000* | NA | 25 U | **20** | NA | 25 U | **10.8** | NA | **7 J** | **91.3** | NA | NA | 25 U |
| **Cyanides** | µg/L | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | **4 J** | 2 U | NA | 10 U | **3** | NA | 10 U | **6** | NA | NA | **4 J** |
| Total Cyanide | | 57-12-5 | 200 | NA | **20.4** | **25** | NA | **15.8 J** | **15 J** | NA | **22.9 J** | **18 J** | NA | NA | **1060 J** |
| **Other** | µg/L | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 1 | Phase 2 | Phase 2 | Supplemental | PDI | Phase 1 | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW-102D | GPEC-MW-102D | W-1 | W-1 | W-1 | W-1 | W-2 |
| | | | Sample Name | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-101WT(F) | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW102D | GPEC-MW-102D | W-1 | GPEC-MW-XX072809 | W-1 | W-1 | W-2 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Deep | Deep | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/14/2012 | 1/7/2016 | 1/7/2016 | 11/12/2024 | 8/31/2010 | 12/18/2012 | 11/11/2024 | 7/28/2009 | 7/28/2009 | 12/19/2012 | 11/5/2024 | 7/28/2009 |
| | | | Parent Sample Code | | | | | | | | | W-1 | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 1 U | NA | **0.51 J** | 5 U | 1 U | **0.29 J** | **5400** | **4900** | **5180** | **310** | **4800** |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | **350** | **310** | **133** | **6.8** | **670** |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | **1600** | **1500** | **2400** | **42** | **2500** |
| o-Xylene | | 95-47-6 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **18** | NA |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **44** | NA |
| Total Xylene | | 1330-20-7 | 5 | 2 U | 2 U | NA | NA | 5 U | 2 U | NA | **7700** | **6900** | **5970** | NA | **6300** |
| Total BTEX | | TBTEX | NE | ND | ND | NA | **0.51** | ND | ND | NA | **15050** | **13610** | **13683** | **420.8** | **14270** |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | NA | 5 UJ | 10 UJ | 5 U | 5 U | 1000 U | 1000 U | 100 U | 5 U | 1000 U |
| Acrolein (propenal) | | 107-02-8 | 5 | R | 20 U | NA | NA | NA | 20 U | NA | NA | NA | 1000 U | NA | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | 20 U | NA | NA | NA | 20 U | NA | NA | NA | 1000 U | NA | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 1 U | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | NA | 1 U | 5 UJ | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | 1 U | 2 U | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | NA | 1 UJ | 5 UJ | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | 1 U | NA | NA | NA | 1 U | NA | NA | NA | 50 U | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | NA | 1 U | 5 UJ | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **9.5** | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | NA | 1 U | NA | NA | **0.24 J** | NA | NA | NA | 1 U | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | 1 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 1 U | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 1 U | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | NA | 1 U | 5 U | NA | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | NA | 1 UJ | NA | 1 U | 1 U | NA | NA | 50 U | 1 U | NA |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **1.46** | **1.26** | NA | 1 U | **2.3 J** | **1.93** | **0.8 J** | 500 U | 500 U | 50 U | 1 U | 500 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | NA | 1 U | **7.2** | **6.73** | **2.9** | 500 U | 500 U | 50 U | 1 U | 500 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 1 U | NA | 1 U | **1.8 J** | **5.34** | **1.2** | 500 U | 500 U | 50 U | 1 U | 500 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | NA | 1 U | 5 U | **0.544 J** | **0.27 J** | 500 U | 500 U | 50 U | 1 U | 500 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | NA | NA | 50 U | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 1 U | NA | 1 U | 5 U | 2 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | 1 U | NA | NA | NA | 1 U | NA | NA | NA | 50 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 2 U | 1 U | NA | 5 UJ | 10 U | 2 U | 5 U | 1000 U | 1000 U | 50 U | 5 U | 1000 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **6** | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | NA | 1 U | NA | 1 U | 1 U | NA | NA | 50 U | **0.31 J** | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 1 U | NA | 5 UJ | 10 U | 1 U | 5 U | 1000 U | 1000 U | 50 U | 5 U | 1000 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 2 U | NA | 1 U | 5 U | 2 U | 1 U | 500 UJ | 500 UJ | 100 U | 1 U | 500 UJ |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | NA | 5 U | NA | NA | 5 U | NA | NA | NA | 5 U | NA |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | **15** | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 5 U | NA | 5 UJ | 10 U | 1 U | 5 U | 1000 U | 1000 U | 50 U | 5 U | 1000 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 1 U | NA | **0.41 J** | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | NA | 1 U | NA | 1 U | 1 U | NA | NA | 50 U | 1 U | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | NA | 1 U | NA | 1 U | 1 U | NA | NA | 50 U | 1 U | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | **2.14** | **1.6** | NA | **1.1** | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 2 | Phase 2 | Supplemental | PDI | Phase 1 | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW-102D | GPEC-MW-102D | W-1 | W-1 | W-1 | W-1 | W-2 |
| | | | Sample Name | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-101WT(F) | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW102D | GPEC-MW-102D | W-1 | GPEC-MW-XX072809 | W-1 | W-1 | W-2 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Deep | Deep | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/14/2012 | 1/7/2016 | 1/7/2016 | 11/12/2024 | 8/31/2010 | 12/18/2012 | 11/11/2024 | 7/28/2009 | 7/28/2009 | 12/19/2012 | 11/5/2024 | 7/28/2009 |
| | | | Parent Sample Code | | | | | | | | | W-1 | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | **0.448 J** | NA | 1 U | **3.6 J** | 1 U | **1.1** | 500 U | 500 U | 50 U | 1 U | 500 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | NA | 1 U | NA | 1 U | 1 U | NA | NA | 50 U | 1 U | NA |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | 1 U | NA | NA | NA | 1 U | NA | NA | NA | 50 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | 1 U | NA | NA | NA | 1 U | NA | NA | NA | 50 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | NA | 1 U | 5 U | 1 U | 1 U | 500 U | 500 U | 50 U | 1 U | 500 U |
| Total VOCs | | TVOC | NE | **3.6** | **3.308** | NA | **2.02** | **14.9** | **14.544** | | **15050** | **13610** | **13683** | **451.61** | **14270** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | **32.8 J** | **14** | 830 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | **79 J** | 830 U | 40 U | 10 U* | 830 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 2 U | 1 U | NA | 10 U | 4.7 U | 3 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | **3.6 J** | 830 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | **0.292 J** | NA | 10 U | 4.7 U | 1 U | 10 U | **380 J** | **370 J** | **165** | 10 U | **330 J** |
| Naphthalene | | 91-20-3 | 10* | 1 U | **0.42 J** | NA | 2 U | 4.7 U | 1 U | 2 U | **12000** | **12000** | **4380** | **120** | **12000** |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | **2 J** | 830 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 0.1 U | NA | 1 U | 4.7 U | 0.1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 0.1 U | NA | 1 U | 4.7 U | 0.1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 0.1 U | NA | 2 U | 4.7 U | 0.1 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 0.1 U | NA | 1 U | 4.7 U | 0.1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 1 U | NA | 2 U | 4.7 U | 3 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 0.1 U | NA | 1 U | 4.7 U | 0.1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 0.1 U | NA | 2 U | 4.7 U | 0.1 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| Total PAHs | | TPAH | NE | ND | **0.712** | NA | ND | ND | ND | | **12459** | **12370** | **4577.8** | **139.6** | **12330** |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | NA | **18** | NA |
| Aniline | | 62-53-3 | 5 | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | NA | 2 U | NA | NA | 2 U* | NA | NA | NA | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | NA | 10 UJ | NA | NA | 10 U | NA | NA | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | 1 U | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | 10 U | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 1 U | NA | NA | 4.7 U | 1 U | NA | 850 U | 830 U | NA | NA | 830 U |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | NA | 1 U | 4.7 U | 1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 1 U | NA | 2 U | 4.7 U | 1 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 1 U | NA | 10 U | 5.9 U | 1 U | 10 U | 1100 U | 1000 U | 40 U | 10 U | 1000 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | NA | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | NA | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | NA | 10 U | 850 U | 830 U | 40 U | **4.3 J** | 830 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 1 U | NA | NA | 4.7 U | 1 U | NA | 850 U | 830 U | NA | NA | 830 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 1 U | NA | NA | 4.7 U | 1 U | NA | 850 U | 830 U | NA | NA | 830 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | NA | 4.7 U | 1 U | NA | 850 U | 830 U | NA | NA | 830 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | **1.9 J** | **84 J** |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 10 U | NA | 20 U | 29 U | 1 U | 20 U | 5300 U | 5200 U | 40 U | 20 U | 5200 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 10 U | NA | 40 U | 29 U | 1 U | 40 U | 5300 U | 5200 U | 40 U | 40 U | 5200 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 0.02 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 1 U | NA | 2 U | 4.7 U | 1 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | 1 U | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 0.02 U | NA | 1 U | 4.7 U | 1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 2 | Phase 2 | Supplemental | PDI | Phase 1 | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW-102D | GPEC-MW-102D | W-1 | W-1 | W-1 | W-1 | W-2 |
| | | | Sample Name | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-101WT(F) | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW102D | GPEC-MW-102D | W-1 | GPEC-MW-XX072809 | W-1 | W-1 | W-2 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Deep | Deep | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/14/2012 | 1/7/2016 | 1/7/2016 | 11/12/2024 | 8/31/2010 | 12/18/2012 | 11/11/2024 | 7/28/2009 | 7/28/2009 | 12/19/2012 | 11/5/2024 | 7/28/2009 |
| | | | Parent Sample Code | | | | | | | | | W-1 | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | NA | 1 U | 4.7 U | 1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 10 U | NA | 10 U | 4.7 UJ | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U* | 830 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 1 U | NA | 2 U | 4.7 U | 1 U | 2 U | 850 U | 830 U | 40 U | 2 U | 830 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | NA | 1 U | 4.7 U | 1 U | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | 0.1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 1 U | NA | 20 U | 12 U | 1 U | 20 U | 2100 U | 2100 U | 40 U | 20 U | 2100 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | NA | 1 U | 4.7 U | NA | 1 U | 850 U | 830 U | 40 U | 1 U | 830 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | 1 U | NA | NA | NA | 1 U | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 0.1 U | NA | 20 U | 29 U | ND | 20 U | 5300 U | 5200 U | 40 U | 20 U | 5200 U |
| Phenol | | 108-95-2 | 1 | 2 U | 1 U | NA | 10 U | 4.7 U | 3 U | 10 U | 850 U | 830 U | 40 U | **2.2 J** | 830 U |
| Pyridine | | 110-86-1 | 50* | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | NA | NA | 4.7 U | NA | NA | 850 U | 830 U | NA | NA | 830 U |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 1 U | NA | 10 U | 12 U | 1 U | 10 U | 2100 U | 2100 U | 40 U | 10 U | 2100 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 1 U | NA | 10 U | 4.7 U | 1 U | 10 U | 850 U | 830 U | 40 U | 10 U | 830 U |
| Total SVOCs | | TSVOC | NE | ND | **0.712** | NA | ND | ND | ND | | **12459** | **12370** | **4577.8** | **166** | **12414** |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | 40.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | 40.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | 8.08 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | 16.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | 16.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | 3.23 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | 3.23 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | 3.23 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | 3.23 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | **1.8** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | **11.3** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | **7.46** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | **5.76** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | **18.9** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | **22.6** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | 1.62 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | 6.46 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | **0.74 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | **2.11** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | **38.7** | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | **13.7** | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 |
| | | | Investigation Phase | Phase 1 | Phase 2 | Phase 2 | Supplemental | PDI | Phase 1 | Supplemental | PDI | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW-102D | GPEC-MW-102D | W-1 | W-1 | W-1 | W-1 | W-2 |
| | | | Sample Name | GPEC-MW101WT | GPEC-MW-101WT | GPEC-MW-101WT(F) | GPEC-MW-101WT | GPEC-MW-102D | GPEC-MW102D | GPEC-MW-102D | W-1 | GPEC-MW-XX072809 | W-1 | W-1 | W-2 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Deep | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/14/2012 | 1/7/2016 | 1/7/2016 | 11/12/2024 | 8/31/2010 | 12/18/2012 | 11/11/2024 | 7/28/2009 | 7/28/2009 | 12/19/2012 | 11/5/2024 | 7/28/2009 |
| | | | Parent Sample Code | | | | | | | | | W-1 | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1242 | | 53469-21-9 | NE | **1.54** | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.53 UJ | 0.52 UJ | 0.05 U | 0.4 U | 0.52 UJ |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | NA | 0.05 U | 0.4 U | NA |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.05 U | 0.05 U | 0.4 U | NA | 0.05 U | 0.4 U | NA | NA | 0.05 U | 0.4 U | NA |
| Total PCBs | | 1336-36-3 | 0.09 | **1.54** | ND | ND | ND | ND | 0.05 U | | ND | ND | 0.05 U | ND | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | NA | 40 U | NA | NA | 40 U | NA | NA | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | NA | **0.7 J** | NA | NA | 2 U | NA | NA | NA | **0.55 J** | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | NA | 2 U | NA | NA | **6.8** | NA | NA | NA | **2.3** | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | NA | **84.8** | NA | NA | **96.3** | NA | NA | NA | **229** | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | NA | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | NA | **37300** | NA | NA | **184000** | NA | NA | NA | **206000** | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | NA | **2.6 J** | NA | NA | 4 U | NA | NA | NA | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | NA | 4 U | NA | NA | **0.71 J** | NA | NA | NA | 4 U | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | NA | 4 U | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | NA | **401** | NA | NA | **103 J** | NA | NA | NA | **119 J** | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | NA | 1.2 U | NA | NA | 1.2 U | NA | NA | NA | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | NA | **8020** | NA | NA | **128000** | NA | NA | NA | **20300** | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | NA | 8 U | NA | NA | **2850** | NA | NA | NA | **186** | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | NA | 0.2 U | NA | NA | 0.2 U | NA | NA | NA | 0.2 U | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | NA | 4 U | NA | NA | **2.1 J** | NA | NA | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | NA | **10100** | NA | NA | **18700** | NA | NA | NA | **16500** | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | NA | **30.9** | NA | NA | 2.5 U | NA | NA | NA | **0.63 J** | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | NA | **257000** | NA | NA | **332000** | NA | NA | NA | **982000** | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | NA | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | NA | **3.6 J** | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | NA | 16 U | NA | NA | 16 U | NA | NA | NA | 16 U | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **60.5** | **2.02** | NA | NA | 250 U | **186** | NA | 250 U | 250 U | 40 U | NA | 250 U |
| Antimony | | 7440-36-0 | 3 | 4 U | 2 U | NA | NA | 15 U | 4 U | NA | 15 U | 15 U | 4 U | NA | 15 U |
| Arsenic | | 7440-38-2 | 25 | 2 U | 2 U | NA | NA | 15 U | **1.9 J** | NA | **8.5 J** | **8.2 J** | **8.69** | NA | **17** |
| Barium | | 7440-39-3 | 1000 | **104** | **102** | NA | NA | **87.2** | **61.8** | NA | **212** | **219** | **459** | NA | **388** |
| Beryllium | | 7440-41-7 | 3* | 2 U | 2 U | NA | NA | 5 U | 2 U | NA | 5 U | 5 U | 2 U | NA | 5 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | 2 U | NA | NA | 5 U | 2 U | NA | 5 U | 5 U | 2 U | NA | 5 UJ |
| Calcium | | 7440-70-2 | NE | **174000** | **140000** | NA | NA | **134000** | **141000** | NA | **135000** | **150000** | **117000** | NA | **174000** |
| Chromium | | 7440-47-3 | 50 | 8 U | 2 U | NA | NA | 5 U | 8 U | NA | **0.55 J** | **0.64 J** | 8 U | NA | **0.58 J** |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | **10** | **6.5 J** | NA | NA | 10 U |
| Cobalt | | 7440-48-4 | NE | 8 U | 2 U | NA | NA | 5 U | 8 U | NA | 5 U | 5 U | 8 U | NA | 5 UJ |
| Copper | | 7440-50-8 | 200 | 8 U | 2 U | NA | NA | 10 U | 8 U | NA | 10 U | 10 U | 8 U | NA | 10 U |
| Iron | | 7439-89-6 | 300 | **248** | **85.5** | NA | NA | **14300** | **12300** | NA | **10400** | **10300** | **24400** | NA | **23800** |
| Lead | | 7439-92-1 | 25 | **0.985 J** | 2 U | NA | NA | 15 U | **0.775 J** | NA | 15 U | 15 U | **1.38 J** | NA | **4.5 J** |
| Magnesium | | 7439-95-4 | 35000* | **33400** | **23500** | NA | NA | **107000** | **104000** | NA | **32000** | **31800** | **25300** | NA | **12500** |
| Manganese | | 7439-96-5 | 300 | **440** | **26.3** | NA | NA | **2280** | **2560** | NA | **465** | **475** | **653** | NA | **792** |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | 2 U | NA | NA | 0.4 U | 0.5 U | NA | 0.2 U | 0.2 U | 0.5 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | **1.89 J** | **1.21 J** | NA | NA | 5 U | **1.32 J** | NA | 5 U | 5 U | 4 U | NA | 5 U |
| Potassium | | 7440-09-7 | NE | **20900** | **17100** | NA | NA | **15000** | **13200** | NA | **38700** | **39300** | **23200** | NA | **38000** |
| Selenium | | 7782-49-2 | 10 | **4.78 J** | **3.1** | NA | NA | 38 U | 8 U | NA | 38 U | 38 U | 8 U | NA | 38 U |
| Silver | | 7440-22-4 | 50 | 2 U | 2 U | NA | NA | 5 U | 2 U | NA | 5 U | 5 U | 2 U | NA | 5 UJ |
| Sodium | | 7440-23-5 | 20000 | **486000** | **397000 D** | NA | NA | **162000** | **146000** | NA | **228000** | **254000** | **134000** | NA | **388000** |
| Thallium | | 7440-28-0 | 0.5* | 2 U | 2 U | NA | NA | 15 U | 2 U | NA | 15 U | 15 U | 2 U | NA | 15 U |
| Vanadium | | 7440-62-2 | NE | 8 U | 2 U | NA | NA | **1.7 J** | 8 U | NA | **2.1 J** | **2 J** | 8 U | NA | **2.6 J** |
| Zinc | | 7440-66-6 | 2000* | **12** | 2 U | NA | NA | 25 U | **9.66** | NA | 25 U | 25 U | 8 U | NA | 25 U |
| **Cyanides** | µg/L | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | **3** | **9** | NA | NA | 10 U | 2 U | NA | 10 U | 10 U | 2 U | NA | 10 U |
| Total Cyanide | | 57-12-5 | 200 | **291** | **224** | NA | NA | **11.5 J** | **14 J** | NA | **32** | **36.6** | 20 U | NA | **25.6** |
| **Other** | µg/L | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 |
| | | | Investigation Phase | Phase 1 | Supplemental | Phase 2 | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 1 |
| | | | Location Name | W-2 | W-2 | GPEC-MW306I | GPEC-MW306I | GPEC-MW306I | GPEC-MW306D | GPEC-MW306D | GPEC-MW328I | GPEC-MW328I | GPEC-MW328D | GPEC-MW328D | GPEC-MW328D | GPEC-MW222D |
| | | | Sample Name | W-2 | W-2 | GPEC-MW-306I | BDUP-1 | GPEC-MW306I | GPEC-MW-306D | GPEC-MW306D | GPEC-MW-328I | GPEC-MW-328I | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW222D |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Deep | Deep | Intermediate | Intermediate | Deep | Deep | Deep | Deep |
| | | | Sample Date | 12/19/2012 | 11/5/2024 | 12/22/2015 | 12/22/2015 | 11/5/2024 | 12/22/2015 | 11/21/2024 | 12/23/2015 | 11/25/2024 | 12/9/2015 | 11/25/2024 | 12/13/2012 | |
| | | | Parent Sample Code | | | | MW-306I | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **2100** | **410** | 1 U | 1 U | **720** | 1 U | 1 U | **0.482 J** | **0.22 J** | **0.624 J** | **0.22 J** | **18.9** | |
| Toluene | | 108-88-3 | 5 | **62.9** | **19** | 1 U | 1 U | **3.5** | 1 U | 1 U | **0.855 J** | 1 U | 1 U | 1 U | 1 U | |
| Ethylbenzene | | 100-41-4 | 5 | **1840** | **600** | **1.4** | **1.37** | **3.1** | 1 U | 1 U | **0.681 J** | 1 U | 1 U | 1 U | **0.508 J** | |
| o-Xylene | | 95-47-6 | 5 | NA | **27** | NA | NA | **7.9** | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| m/p-Xylene | | 179601-23-1 | 5 | NA | **130** | NA | NA | **7.1** | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| Total Xylene | | 1330-20-7 | 5 | **1600** | NA | 2 U | 2 U | NA | 2 U | NA | **2.88** | NA | 2 U | NA | 2 U | |
| Total BTEX | | TBTEX | NE | **5602.9** | **1186** | **1.4** | **1.37** | **741.6** | ND | ND | **4.898** | **0.22** | **0.624** | **0.22** | **19.408** | |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | **392** | 10 U | 2 U | 2 U | 10 U | 2 U | 5 U | 2 U | 5 U | 5 U | 5 U | 5 U | |
| Acrolein (propenal) | | 107-02-8 | 5 | 400 U | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA | 20 R | NA | R | |
| Acrylonitrile | | 107-13-1 | 5 | 400 U | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA | 20 U | NA | 20 U | |
| Bromochloromethane | | 74-97-5 | 5 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| Bromodichloromethane | | 75-27-4 | 50* | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Bromoform | | 75-25-2 | 50* | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Bromomethane | | 74-83-9 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 R | NA | 1 U | |
| Carbon disulfide | | 75-15-0 | 60* | 20 U | 2 U | 2 U | 2 U | 2 U | 2 U | 1 U | **4.99** | **3.1** | 1 U | 1 U | **4.81** | |
| Carbon tetrachloride | | 56-23-5 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chlorobenzene | | 108-90-7 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chloroethane | | 75-00-3 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 20 U | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | |
| Chloroform | | 67-66-3 | 7 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Chloromethane | | 74-87-3 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Cyclohexane | | 110-82-7 | NE | NA | **91** | NA | NA | **2.3** | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| Dibromochloromethane | | 124-48-1 | 50* | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | **0.507 J** | |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 20 U | 2 U | 1 U | 1 U | 2 U | **1.48** | **1.1** | 1 U | 1 U | **3.36** | **1.9** | **4.76** | |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | **0.68 J** | **0.401 J** | |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | **0.834 J** | **0.26** | 1 U | 1 U | **95** | **130** | **37.7** | |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | **12.9** | **12** | **2.71** | |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U | |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | |
| Diisopropyl ether | | 108-20-3 | NE | 20 U | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | |
| 2-Hexanone | | 591-78-6 | 50* | 20 U | 10 U | 1 U | 1 U | 10 U | 1 U | 5 U | 1 U | 5 U* | 1 U | 5 U* | 2 U | |
| Isopropylbenzene | | 98-82-8 | 5 | NA | **55** | NA | NA | **9.6** | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | **33.9** | **25** | **35** | |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 20 U | 10 U | 1 U | 1 U | 10 U | 1 U | 5 U | 1 U | 5 U* | 1 U | 5 U* | 1 U | |
| Methylene chloride | | 75-09-2 | 5 | 40 U | 2 U | 2 U | 2 U | 2 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | |
| Styrene | | 100-42-5 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | **0.626 J** | 1 U | 1 U | 1 U | 1 U | |
| Methyl acetate | | 79-20-9 | NE | NA | 10 U | NA | NA | 10 U | NA | 5 U | NA | 5 U | NA | 5 U | NA | |
| Methylcyclohexane | | 108-87-2 | NE | NA | **58** | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 20 U | 10 U | 2 U | 2 U | 10 U | 2 U | 5 U | **1.35 J** | 5 U | 1 U | 5 U | 1 U | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| Tetrachloroethene | | 127-18-4 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | **84.7** | **45** | **274** | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | 2 U | NA | NA | 2 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Supplemental | Phase 2 | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 1 |
| | | | Location Name | W-2 | W-2 | GPEC-MW306I | GPEC-MW306I | GPEC-MW306I | GPEC-MW306D | GPEC-MW306D | GPEC-MW328I | GPEC-MW328I | GPEC-MW328D | GPEC-MW328D | GPEC-MW222D |
| | | | Sample Name | W-2 | W-2 | GPEC-MW-306I | BDUP-1 | GPEC-MW306I | GPEC-MW-306D | GPEC-MW306D | GPEC-MW-328I | GPEC-MW-328I | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW222D |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Deep | Deep | Intermediate | Intermediate | Deep | Deep | Deep |
| | | | Sample Date | 12/19/2012 | 11/5/2024 | 12/22/2015 | 12/22/2015 | 11/5/2024 | 12/22/2015 | 11/21/2024 | 12/23/2015 | 11/25/2024 | 12/9/2015 | 11/25/2024 | 12/13/2012 |
| | | | Parent Sample Code | | | | MW-306I | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | **30.9** | **19** | **26.8** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 20 U | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | 20 U | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | 20 U | 2 U | 1 U | 1 U | 2 U | 1 U | 1 U | 1 U | 1 U | **0.76 J** | **0.55 J** | **12.7** |
| Total VOCs | | TVOC | NE | **5994.9** | **1390** | **1.4** | **1.37** | **753.5** | **2.314** | **1.36** | **11.864** | **3.32** | **262.144** | **234.35** | **418.796** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **16.7 J** | **49** | 1 U | 1 U | **18** | 1 U | 10 U | **0.377 J** | 10 U | 1 U | 10 U | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 30 U | **1.2 J*** | 1 U | 1 U | 10 U* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Fluorene | | 86-73-7 | 50* | 30 U | **13** | 1 U | 1 U | **1.2 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | **96** | **290** | 1 U | 1 U | **21** | 1 U | 10 U | **0.443 J** | 10 U | 1 U | 10 U | 1 U |
| Naphthalene | | 91-20-3 | 10* | **3300** | **11000** | 1 U | 1 U | **590** | 1 U | 2 U | **1.22** | 2 U | 1 U | 2 U | 1 U |
| Phenanthrene | | 85-01-8 | 50* | 30 U | **6 J** | 1 U | 1 U | 10 U | 1 U | 10 U | **0.565 J** | 10 U | 1 U | 10 U | 1 U |
| Pyrene | | 129-00-0 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 30 U | 1 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 1 U | 1 U | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 30 U | 1 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 1 U | 1 U | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 30 U | 2 U | 0.1 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 1 U | 2 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 30 U | 1 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 1 U | 1 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 30 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 30 U | 1 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 1 U | 1 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 30 U | 2 U | 0.1 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 1 U | 2 U | 0.1 U |
| Total PAHs | | TPAH | NE | **3412.7** | **11359.2** | ND | ND | **630.2** | ND | ND | **2.605** | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | **19** | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | 10 U | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 30 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 30 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Caprolactam | | 105-60-2 | NE | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 30 U | **9.2 J** | 1 U | 1 U | **1.6 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 30 U | **18** | 1 U | 1 U | **1.8 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 30 U | **4.2 J** | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 30 U | 20 U | 10 U | 10 U | 20 U | 10 U | 20 U | 10 U | 20 U | 10 U | 20 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 30 U | 40 U | 10 U | 10 U | 40 U | 10 U | 40 U | 10 U | 40 U | 10 U | 40 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 30 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 30 U | 1 U | 0.02 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U | 1 U | 1 U | 0.02 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Supplemental | Phase 2 | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 1 |
| | | | Location Name | W-2 | W-2 | GPEC-MW306I | GPEC-MW306I | GPEC-MW306I | GPEC-MW306D | GPEC-MW306D | GPEC-MW328I | GPEC-MW328I | GPEC-MW328D | GPEC-MW328D | GPEC-MW222D |
| | | | Sample Name | W-2 | W-2 | GPEC-MW-306I | BDUP-1 | GPEC-MW306I | GPEC-MW-306D | GPEC-MW306D | GPEC-MW-328I | GPEC-MW-328I | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW222D |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Deep | Deep | Intermediate | Intermediate | Deep | Deep | Deep |
| | | | Sample Date | 12/19/2012 | 11/5/2024 | 12/22/2015 | 12/22/2015 | 11/5/2024 | 12/22/2015 | 11/21/2024 | 12/23/2015 | 11/25/2024 | 12/9/2015 | 11/25/2024 | 12/13/2012 |
| | | | Parent Sample Code | | | | MW-306I | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 30 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 30 U | 10 U* | 10 U | 10 U | 10 U* | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 1 U |
| Hexachloroethane | | 67-72-1 | 5 | 30 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 30 U | **1.9 J** | 1 U | 1 U | 10 U | 1 U | 10 U | **5.37** | 10 U | 1 U | 10 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 30 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 30 U | 20 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 30 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 30 U | 20 U | 0.1 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U | 1 U | 20 U | 0.1 U |
| Phenol | | 108-95-2 | 1 | 30 U | **2.5 J** | 1 U | 1 U | **7.5 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 30 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Total SVOCs | | TSVOC | NE | **3412.7** | **11414** | ND | ND | **641.1** | ND | ND | **7.975** | ND | ND | ND | ND |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 4 | Area 5 |
| | | | Investigation Phase | Phase 1 | Supplemental | Phase 2 | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 1 |
| | | | Location Name | W-2 | W-2 | GPEC-MW306I | GPEC-MW306I | GPEC-MW306I | GPEC-MW306D | GPEC-MW306D | GPEC-MW328I | GPEC-MW328I | GPEC-MW328D | GPEC-MW328D | GPEC-MW328D | GPEC-MW222D |
| | | | Sample Name | W-2 | W-2 | GPEC-MW-306I | BDUP-1 | GPEC-MW306I | GPEC-MW-306D | GPEC-MW306D | GPEC-MW-328I | GPEC-MW-328I | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW-328D | GPEC-MW222D |
| | | | Screen Zone | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Deep | Deep | Intermediate | Intermediate | Deep | Deep | Deep | Deep |
| | | | Sample Date | 12/19/2012 | 11/5/2024 | 12/22/2015 | 12/22/2015 | 11/5/2024 | 12/22/2015 | 11/21/2024 | 12/23/2015 | 11/25/2024 | 12/9/2015 | 11/25/2024 | 12/13/2012 | |
| | | | Parent Sample Code | | | | MW-306I | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 0.05 UJ | |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | 40 U | NA | NA | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | NA | |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | **1.4 J** | NA | 2 U | NA | |
| Arsenic | | 7440-38-2 | 25 | NA | **5.4** | NA | NA | 2 U | NA | 2 U | NA | **6.2** | NA | 2 U | NA | |
| Barium | | 7440-39-3 | 1000 | NA | **241** | NA | NA | **378** | NA | **140** | NA | **768** | NA | **50.7** | NA | |
| Beryllium | | 7440-41-7 | 3* | NA | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | |
| Calcium | | 7440-70-2 | NE | NA | **117000** | NA | NA | **149000** | NA | **154000** | NA | **279000** | NA | **94000** | NA | |
| Chromium | | 7440-47-3 | 50 | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | **1.8 J** | NA | 4 U | NA | |
| Cobalt | | 7440-48-4 | NE | NA | **0.41 J** | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | **1.3 J** | NA | |
| Copper | | 7440-50-8 | 200 | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | |
| Iron | | 7439-89-6 | 300 | NA | **4140** | NA | NA | **163** | NA | 120 U | NA | **116 J** | NA | 120 U | NA | |
| Lead | | 7439-92-1 | 25 | NA | **0.55 J** | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | |
| Magnesium | | 7439-95-4 | 35000* | NA | **20800** | NA | NA | **28600** | NA | **53700** | NA | **768000** | NA | **38400** | NA | |
| Manganese | | 7439-96-5 | 300 | NA | **707** | NA | NA | **2120** | NA | **1710** | NA | **130** | NA | **967** | NA | |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | |
| Nickel | | 7440-02-0 | 100 | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | **1.5 J** | NA | **1.9 J** | NA | |
| Potassium | | 7440-09-7 | NE | NA | **15700** | NA | NA | **14900** | NA | **12600** | NA | **208000** | NA | **7500** | NA | |
| Selenium | | 7782-49-2 | 10 | NA | **0.54 J** | NA | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U | NA | |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | |
| Sodium | | 7440-23-5 | 20000 | NA | **579000** | NA | NA | **596000** | NA | **225000** | NA | **6750000** | NA | **263000** | NA | |
| Thallium | | 7440-28-0 | 0.5* | NA | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | |
| Vanadium | | 7440-62-2 | NE | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | **9.4** | NA | 4 U | NA | |
| Zinc | | 7440-66-6 | 2000* | NA | 16 U | NA | NA | 16 U | NA | 16 U | NA | 16 U | NA | 16 U | NA | |
| **Total Metals** | µg/L | | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | **90.9** | **273** | NA | **16.9** | NA | **142** | NA | **104** | NA | **194** | |
| Antimony | | 7440-36-0 | 3 | 4 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 4 U | |
| Arsenic | | 7440-38-2 | 25 | **15.4** | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | **1.25 J** | NA | **1.53 J** | |
| Barium | | 7440-39-3 | 1000 | **296** | NA | **168** | **185** | NA | **68.5** | NA | **392** | NA | **106** | NA | **78.9** | |
| Beryllium | | 7440-41-7 | 3* | 2 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | |
| Calcium | | 7440-70-2 | NE | **124000** | NA | **59700** | **61800** | NA | **61000** | NA | **100000** | NA | **59900** | NA | **38100** | |
| Chromium | | 7440-47-3 | 50 | 8 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 8 U | |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Cobalt | | 7440-48-4 | NE | 8 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 8 U | |
| Copper | | 7440-50-8 | 200 | 8 U | NA | **4.04** | **5.47** | NA | 2 U | NA | **5.32** | NA | 2 U | NA | 8 U | |
| Iron | | 7439-89-6 | 300 | **28500** | NA | **3720** | **4020** | NA | **4150** | NA | **465** | NA | **4920** | NA | **898** | |
| Lead | | 7439-92-1 | 25 | **3.37** | NA | 2 U | **1.95 J** | NA | 2 U | NA | **0.834 J** | NA | **0.586 J** | NA | **0.856 J** | |
| Magnesium | | 7439-95-4 | 35000* | **9030** | NA | **13200** | **13900** | NA | **21100** | NA | **256000 D** | NA | **19100** | NA | **36000** | |
| Manganese | | 7439-96-5 | 300 | **603** | NA | **428** | **477** | NA | **777** | NA | **174** | NA | **661** | NA | **282** | |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 0.5 U | |
| Nickel | | 7440-02-0 | 100 | **2.68 J** | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | **1.73 J** | |
| Potassium | | 7440-09-7 | NE | **15100** | NA | **7590** | **8060** | NA | **3830** | NA | **70400** | NA | **5450** | NA | **16500** | |
| Selenium | | 7782-49-2 | 10 | 8 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 8 U | |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | |
| Sodium | | 7440-23-5 | 20000 | **342000** | NA | **149000** | **157000** | NA | **39500** | NA | **2440000 D** | NA | **198000** | NA | **255000** | |
| Thallium | | 7440-28-0 | 0.5* | 2 U | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | |
| Vanadium | | 7440-62-2 | NE | 8 U | NA | 2 U | 2 U | NA | 2 U | NA | **2.27** | NA | 2 U | NA | **2.63 J** | |
| Zinc | | 7440-66-6 | 2000* | **4.61 J** | NA | **4.11** | **6.77** | NA | 2 U | NA | **5.88** | NA | 2 U | NA | **5.69 J** | |
| **Cyanides** | µg/L | | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | NA | 5 U | 5 U | NA | 5 U | NA | 5 U | NA | 5 U | NA | 2 U | |
| Total Cyanide | | 57-12-5 | 200 | 20 U | NA | 20 U | **9.7 J** | NA | 20 U | NA | 20 U | NA | 20 U | NA | 20 U | |
| **Other** | µg/L | | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Supplemental | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 |
| | | | Location Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW333I | GPEC-MW333I | GPEC-MW333D | GPEC-MW-333D | GPEC-MW339S | GPEC-MW339S | GPEC-MW339I |
| | | | Sample Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW-333I | GPEC-MW333I | GPEC-MW-333D | GPEC-MW-333D | MW-339S | GPEC-MW339S | GPEC-MW-339I |
| | | | Screen Zone | Deep | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate |
| | | | Sample Date | 11/5/2024 | 12/13/2012 | 11/5/2024 | 3/24/2017 | 11/7/2024 | 1/7/2016 | 11/5/2024 | 1/7/2016 | 11/6/2024 | 12/22/2015 | 10/30/2024 | 12/8/2015 |
| | | | Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **4** | 1 U | **13** | **45** | 1 U | **63.4** | **40** | **72.4 D** | **78** | **8.43** | **230** | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | **0.74 J** | **2.65** | 1 U | **0.414 J** | 1 U | **6.25 D** | **13** | **0.697 J** | **0.38 J** | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | **2.4** | **90.1** | 1 U | **8.51** | **7.4** | **57.9 D** | **46** | **2.24** | **23** | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | **1.9** | NA | 1 U | NA | 1 U | NA | **60** | NA | **3.9** | NA |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | **0.81 J** | NA | 1 U | NA | 1 U | NA | **36** | NA | **0.78 J** | NA |
| Total Xylene | | 1330-20-7 | 5 | NA | 2 U | NA | **58.2** | NA | 2 U | NA | **9.85 DJ** | NA | **3.56** | NA | 2 U |
| Total BTEX | | TBTEX | NE | **4** | ND | **18.85** | **196** | ND | **72.324** | **47.4** | **146.4** | **233** | **14.927** | **258.06** | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | 5 U | **12.1** | 5 U | 5 U | 5 U | 25 U | 10 U | 2 U | **11** | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | R | NA | 10 U | NA | 20 U | NA | 100 U | NA | 20 U | NA | 20 R |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 10 U | NA | 20 U | NA | 100 U | NA | 20 U | NA | 20 U |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U* | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U* | 1 U | 1 U* | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U* | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | 2 R | NA | 2 U | NA | 10 U | NA | 2 U | NA | 2 R |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | **78.4** | 1 U | **1.01** | 1 U | 1 U | 1 U | 5 U | 2 U | 2 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U* | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 2 R | NA | 1 U | NA | 5 U | NA | 1 U | NA | 1 U |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U* | NA | 1 U* | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U* | NA | 1 U* | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U* | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U* | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | **0.396 J** | **0.33 J** | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 1 U | 0.5 U | 1 U | **1.27** | **0.97 J** | 5 U | **1.8 J** | 1 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **6.3** | 1 U | 1 U | 0.5 U | 1 U | **142** | **150** | **446 D** | **620** | 1 U | 1 U | **134** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | **11** | 1 U | 1 U | 0.5 U | 1 U | **18.3** | **15** | **56.8 D** | **57** | 1 U | 1 U | **1.02** |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 2 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 0.5 U | NA | 1 U | NA | 5 U | NA | 1 U | NA | 1 U |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 2 U | 5 U | 2 U | 5 U | 1 U | 5 U | 5 U | 10 U | 1 U | 5 U | 1 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | **14** | NA | 1 U | NA | **0.6 J** | NA | **8.6** | NA | **2.7** | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | **19** | 1 U | 1 U | 0.5 U | 1 U | **1.42** | **3.2** | **5.67 D** | **8.7** | 1 U | 1 U | **1.01** |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U* | 1 U | 5 U* | 2 U | 5 U | 1 U | 5 U | 5 U | 10 U | 1 U | 5 U | 1 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 2 U | 1 U | 1 U | 1 U | 2 U | 1 U | 10 U | 2 U | 2 U | 1 U | 2 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | **0.536 J** | 1 U | **3.67 DJ** | **4.3** | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | 5 U | NA | 5 U | NA | 5 U | NA | 10 U | NA | 5 U | NA |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 1 U | 5 U | **4** | 5 U | 5 U | 5 U | 25 U | 10 U | 2 U | **2.2 J** | 1 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | **14** | **2.2** | **27.7 D** | **0.72 J** | 1 U | 1 U | **5.59** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | 1 U | NA | 1 U* | NA | 1 U | NA | 2 U | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U* | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 |
| | | | Location Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW333I | GPEC-MW333I | GPEC-MW333D | GPEC-MW-333D | GPEC-MW339S | GPEC-MW339S | GPEC-MW339I |
| | | | Sample Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW-333I | GPEC-MW333I | GPEC-MW-333D | GPEC-MW-333D | MW-339S | GPEC-MW339S | GPEC-MW-339I |
| | | | Screen Zone | Deep | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate |
| | | | Sample Date | 11/5/2024 | 12/13/2012 | 11/5/2024 | 3/24/2017 | 11/7/2024 | 1/7/2016 | 11/5/2024 | 1/7/2016 | 11/6/2024 | 12/22/2015 | 10/30/2024 | 12/8/2015 |
| | | | Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | **117** | **46** | **575 D** | **2.2** | 1 U | 1 U | **23** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 0.5 U | NA | 1 U | NA | 5 U | NA | 1 U | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA | 1 U | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | **26** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | **19.2 D** | **7.8** | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **66.3** | **78.4** | **32.85** | **213.11** | ND | **367.246** | **265.7** | **1280.44** | **944.12** | **14.927** | **273.96** | **164.62** |
| **PAHs** | µg/L | | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | **12.7** | **18** | **25.2** | 10 U | **0.381 J** | 10 U | **1.74** | 10 UH | **0.727 J** | **1.9 J** | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U* | **0.437 J** | 10 U* | **0.971 J** | 10 U | 1 U | 10 U* | **0.278 J** | 10 UH | 1 U | **1.4 J** | 1 U |
| Anthracene | | 120-12-7 | 50* | 10 U | **2.45** | 10 U | **3.76** | 10 U | 1 U | 10 U | 1 U | 10 UH | **0.555 J** | 10 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | **0.305 J** | 10 U | **0.954 J** | 10 U | 1 U | 10 U | 1 U | 10 UH | **0.944 J** | **2.5 J** | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | **4.21** | **1.5 J** | **5.59** | 10 U | **0.303 J** | 10 U | **0.262 J** | 10 UH | **2.33** | **5.6 J** | 1 U |
| Fluorene | | 86-73-7 | 50* | 10 U | **14.3** | **9.5 J** | **17.9** | 10 U | **0.606 J** | 10 U | **0.591 J** | 10 UH | **0.532 J** | **1.3 J** | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 1 U | **5.7 J** | **63.9** | 10 U | **2.33** | 10 U | **2.91** | 10 UH | **1.68** | **1.8 J** | 1 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 1 U | **230** | **286** | 2 U | **3.58** | 2 U | **2.17** | 2 UH | **6.87** | **17** | 1 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | **6.83** | **3.8 J** | **30** | 10 U | **1.06** | 10 U | **0.958 J** | 10 UH | **1.91** | **4.4 J** | 1 U |
| Pyrene | | 129-00-0 | 50* | 10 U | **4.89** | **2.3 J** | **7.72** | 10 U | **0.327 J** | 10 U | **0.297 J** | 10 UH | **3.28** | **6.7 J** | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | **1.04** | 1 U | **2.19** | 1 U | **0.263** | 1 U | **0.202** | 1 UH | **1.06** | **3.4** | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | **0.732** | 1 U | **1.52** | 1 U | **0.158** | 1 U | **0.129** | 1 UH | **1.22** | **3.8** | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | **0.379** | 2 U | **1.07** | 2 U | **0.214** | 2 U | **0.191** | 2 UH | **0.994** | **3.6** | 1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | **0.409** | 1 U | **0.781 J** | 1 U | **0.156** | 1 U | **0.105** | 1 UH | **0.662** | **1.5** | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | **0.983 J** | 2 U | **2.09** | 2 U | 1 U | 2 U | 1 U | 2 UH | **1.78** | **3.2** | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | **0.162** | 1 U | 1 UJ | 1 U | **0.271** | 1 U | **0.247** | 1 UH | **0.551** | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | **0.329** | 2 U | **0.607 J** | 2 U | **0.274** | 2 U | **0.211** | 2 UH | **1.03** | **2.3** | 1 U |
| Total PAHs | | TPAH | NE | ND | **50.156** | **270.8** | **450.3** | ND | **9.923** | ND | **10.291** | ND | **26.125** | **60.4** | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | **NA** | 10 U | NA | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 UH | NA | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | 1 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | NA | **0.2 J** | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | 10 U | **NA** | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UH | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 UH | **0.985 J** | **2** | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 10 U | **1.59** | **2.5 J** | **7.05** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 1 U | 10 U | **1.11** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | **1.78** | **2.4 J** | **4.69** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 1 U | 10 U | **1.37** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 1 U | 10 U | **0.547 J** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 1 U | 20 U | 1 U | 20 U | 10 U | 20 U | 10 U | 20 UH | 10 U | 20 U | 10 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 1 U | 40 U | 1 U | 40 U | 10 U | 40 U | 10 U | 40 UH | 10 U | 40 U | 10 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 UH | 1 U | 2 U | 1 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 0.02 U | 1 U | 1 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 UH | 0.02 U | 1 U | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Phase 1 | Supplemental | Supplemental Inv. | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 |
| | | | Location Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW333I | GPEC-MW333I | GPEC-MW333D | GPEC-MW-333D | GPEC-MW339S | GPEC-MW339S | GPEC-MW339I |
| | | | Sample Name | GPEC-MW222D | GPEC-MW222S | GPEC-MW222S | GPEC-MW332I | GPEC-MW332I | GPEC-MW-333I | GPEC-MW333I | GPEC-MW-333D | GPEC-MW-333D | MW-339S | GPEC-MW339S | GPEC-MW-339I |
| | | | Screen Zone | Deep | Shallow | Shallow | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate |
| | | | Sample Date | 11/5/2024 | 12/13/2012 | 11/5/2024 | 3/24/2017 | 11/7/2024 | 1/7/2016 | 11/5/2024 | 1/7/2016 | 11/6/2024 | 12/22/2015 | 10/30/2024 | 12/8/2015 |
| | | | Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UH | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U* | 1 U | 10 U* | 1 U | 10 U | 10 U | 10 U* | 10 U | 10 UH* | 10 U | 10 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 UH | 1 U | 2 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 1 U | 10 U | **1.91** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 1 U | 10 U | **1.27** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UH | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 1 U | 20 U | **0.691 J** | 20 U | 1 U | 20 U | 1 U | 20 UH | 1 U | 20 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 UH | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 0.1 U | 20 U | 1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 UH | 0.1 U | 20 U | 1 U |
| Phenol | | 108-95-2 | 1 | 10 U | 1 U | 10 U | **6.31** | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 UH | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 UH | 1 U | 10 U | 1 U |
| Total SVOCs | | TSVOC | NE | ND | **53.526** | **275.7** | **475.448** | ND | **9.923** | ND | **10.291** | ND | **27.11** | **62.4** | ND |
| **PFAS** | | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | **Area** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** | **Area 5** |
| | | | **Investigation Phase** | **Supplemental** | **Phase 1** | **Supplemental** | **Supplemental Inv.** | **Supplemental** | **Phase 2** | **Supplemental** | **Phase 2** | **Supplemental** | **Phase 2** | **Supplemental** | **Phase 2** |
| | | | **Location Name** | **GPEC-MW222D** | **GPEC-MW222S** | **GPEC-MW222S** | **GPEC-MW332I** | **GPEC-MW332I** | **GPEC-MW333I** | **GPEC-MW333I** | **GPEC-MW333D** | **GPEC-MW-333D** | **GPEC-MW339S** | **GPEC-MW339S** | **GPEC-MW339I** |
| | | | **Sample Name** | **GPEC-MW222D** | **GPEC-MW222S** | **GPEC-MW222S** | **GPEC-MW332I** | **GPEC-MW332I** | **GPEC-MW-333I** | **GPEC-MW333I** | **GPEC-MW-333D** | **GPEC-MW-333D** | **MW-339S** | **GPEC-MW339S** | **GPEC-MW-339I** |
| | | | **Screen Zone** | **Deep** | **Shallow** | **Shallow** | **Intermediate** | **Intermediate** | **Intermediate** | **Intermediate** | **Deep** | **Deep** | **Shallow** | **Shallow** | **Intermediate** |
| | | | **Sample Date** | **11/5/2024** | **12/13/2012** | **11/5/2024** | **3/24/2017** | **11/7/2024** | **1/7/2016** | **11/5/2024** | **1/7/2016** | **11/6/2024** | **12/22/2015** | **10/30/2024** | **12/8/2015** |
| | | | Parent Sample Code | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | **0.43** | 0.4 U | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | **0.257** | 0.4 U | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 UJ | ND | 0.05 UJ | ND | ND | ND | ND | ND | **0.687** | ND | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | **1.4 J** | NA | **0.85 J** | NA | **2.3** | NA | 2 U | NA | **0.52 J** | NA | **2** | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | 2 U | NA | **2.8** | NA | 2 U | NA | 2 U | NA | **1.3 J** | NA |
| Barium | | 7440-39-3 | 1000 | **655** | NA | **175** | NA | **200** | NA | **140** | NA | **150** | NA | **324** | NA |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **284000** | NA | **94900** | NA | **281000** | NA | **55100** | NA | **73600** | NA | **121000** | NA |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | 4 U | NA | 4 U | NA | **1.9 J** | NA | 4 U | NA | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | **0.69 J** | NA | 4 U | NA | **1.1 J** | NA | 4 U | NA | **0.43 J** | NA | **2.4 J** | NA |
| Copper | | 7440-50-8 | 200 | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | **10.9** | NA |
| Iron | | 7439-89-6 | 300 | 120 U | NA | 120 U | NA | 120 U | NA | 120 U | NA | 120 U | NA | 120 U | NA |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | 1.2 U | NA | **0.42 J** | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **21300** | NA | **12400** | NA | **601000** | NA | **71300** | NA | **40100** | NA | **15500** | NA |
| Manganese | | 7439-96-5 | 300 | **323** | NA | **398** | NA | **217** | NA | **24.4** | NA | **483** | NA | **716** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA |
| Nickel | | 7440-02-0 | 100 | **24.5** | NA | **1.7 J** | NA | **1.5 J** | NA | 4 U | NA | **2.2 J** | NA | **6.5** | NA |
| Potassium | | 7440-09-7 | NE | **18100** | NA | **8990** | NA | **227000** | NA | **59200** | NA | **14300** | NA | **5040** | NA |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | **2.8** | NA | 2.5 U | NA | **63.7** | NA | 2.5 U | NA | **1 J** | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **174000** | NA | **40600** | NA | **7110000** | NA | **485000** | NA | **484000** | NA | **31600** | NA |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | 4 U | NA | **8.6** | NA | **1.5 J** | NA | 4 U | NA | 4 U | NA |
| Zinc | | 7440-66-6 | 2000* | **23.1** | NA | **12.3 J** | NA | 16 U | NA | 16 U | NA | **114** | NA | **224** | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **266** | NA | **1230** | NA | **217** | NA | **261** | **12100** | **18800** | NA | **697** |
| Antimony | | 7440-36-0 | 3 | NA | 4 U | NA | **1.18 J** | NA | 2 U | NA | 2 U | **1.7 J** | 2 U | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | **2.53** | NA | **3.13** | NA | 2 U | NA | **4.1** | **6.6** | **13.6** | NA | **2.46** |
| Barium | | 7440-39-3 | 1000 | NA | **161** | NA | **382** | NA | **68.9** | NA | **144** | **268** | **637** | NA | **132** |
| Beryllium | | 7440-41-7 | 3* | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | **0.72 J** | **5.33** | NA | 2 U |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | **0.96 J** | **6.07** | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **89200** | NA | **232000** | NA | **38000** | NA | **35800** | **84300** | **70400** | NA | **111000** |
| Chromium | | 7440-47-3 | 50 | NA | 8 U | NA | **3.8** | NA | **2.57** | NA | 2 U | **32.5** | **61.1** | NA | **2.18** |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | **NA** | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | 8 U | NA | **1.31 J** | NA | 2 U | NA | 2 U | **9.9** | **37.7** | NA | 2 U |
| Copper | | 7440-50-8 | 200 | NA | 8 U | NA | **5.37** | NA | 2 U | NA | 2 U | **91.9** | **985** | NA | **4.34** |
| Iron | | 7439-89-6 | 300 | NA | **6210** | NA | **6260** | NA | **673** | NA | **1930** | **26900** | **56500** | NA | **10000** |
| Lead | | 7439-92-1 | 25 | NA | **248** | NA | **17.7** | NA | **0.768 J** | NA | **1.82 J** | **124** | **4270** | NA | **8.68** |
| Magnesium | | 7439-95-4 | 35000* | NA | **10800** | NA | **476000** | NA | **45300** | NA | **25900** | **48300** | **16000** | NA | **12300** |
| Manganese | | 7439-96-5 | 300 | NA | **493** | NA | **586 J** | NA | **108** | NA | **383** | **855** | **1600** | NA | **3330** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.5 U | NA | 0.5 U | NA | 2 U | NA | 2 U | **0.23** | 2 U | NA | 2 U |
| Nickel | | 7440-02-0 | 100 | NA | **1.57 J** | NA | **4.24** | NA | 2 U | NA | **2.1** | **29.3** | **76.8** | NA | 2 U |
| Potassium | | 7440-09-7 | NE | NA | **5660** | NA | **165000** | NA | **35500** | NA | **14800** | **17400** | **6300** | NA | **6720** |
| Selenium | | 7782-49-2 | 10 | NA | 8 U | NA | **4.37** | NA | 2 U | NA | 2 U | 5 U | **7.97** | NA | 2 U |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 4 U | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **9330** | NA | **5330000** | NA | **284000 D** | NA | **333000 D** | **479000** | **6400** | NA | **52300** |
| Thallium | | 7440-28-0 | 0.5* | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 1.6 U | 2 U | NA | **0.544 J** |
| Vanadium | | 7440-62-2 | NE | NA | 8 U | NA | **12.7** | NA | **3.45** | NA | 2 U | **31.5** | **169** | NA | **2.05** |
| Zinc | | 7440-66-6 | 2000* | NA | **56.2** | NA | **28.2** | NA | **2.02** | NA | **4.03** | **2770** | **2400** | NA | **6.92** |
| **Cyanides** | µg/L | | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | 2 U | NA | 5 U | NA | **5** | NA | **5** | NA | 5 U | NA | 5 U |
| Total Cyanide | | 57-12-5 | 200 | NA | 20 U | NA | 20 U | NA | **69** | NA | **27** | NA | **16 J** | NA | 20 U |
| **Other** | µg/L | | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Supplemental | 67 |
| | | | Location Name | GPEC-MW339I | GPEC-MW339D | GPEC-MW339D | GPEC-MW344S | GPEC-MW344S | GPEC-MW344I | GPEC-MW344I | GPEC-MW344D | GPEC-MW344D | | |
| | | | Sample Name | GPEC-MW339I | GPEC-MW-339D | GPEC-MW339D | GPEC-MW-344S | GPEC-MW344S | GPEC-MW-344I | GPEC-MW344I | GPEC-MW-344D | GPEC-MW344D | GPEC-MW904 | GPEC-MW905 |
| | | | Screen Zone | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow |
| | | | Sample Date | 10/30/2024 | 12/8/2015 | 10/30/2024 | 12/23/2015 | 11/14/2024 | 12/23/2015 | 11/14/2024 | 12/9/2015 | 11/14/2024 | 11/14/2024 | 11/21/2024 |
| | | | Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **0.27 J** | 1 U | 1 U | **3.22** | 1 U | **1.47 DJ** | **0.63 J** | **68** | **9.5** | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 1 U | **0.468 J** | 1 U | **0.848 DJ** | 1 U | **5.43** | 1 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | **32.4** | 1 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | **0.84 J** | 1 U | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | **0.66 J** | 1 U | 1 U |
| Total Xylene | | 1330-20-7 | 5 | NA | 2 U | NA | 2 U | NA | 4 U | NA | **7.98** | NA | NA | NA |
| Total BTEX | | TBTEX | NE | **0.27** | ND | ND | **3.688** | ND | **2.318** | **0.63** | **113.81** | **11** | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | 5 U | 2 U | 5 U | 4 U | 5 U | 10 U | 5 U | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 R | NA | 20 U | NA | 40 U | NA | 40 R | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 20 U | NA | 40 U | NA | 40 U | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U* | 1 U | 1 U* | 1 U | 1 U* | 2 U | 1 U* | 2 U | 1 U* | 1 U* | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U* | 1 U | 1 U* | 1 U | 1 U* | 2 U | 1 U* | 2 U | 1 U* | 1 U* | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | 2 R | NA | 2 U | NA | 4 U | NA | 4 R | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 1 U | 2 U | 1 U | 4 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U* | 1 U | 1 U* | 1 U | 1 U* | 2 U | 1 U* | 2 U | 1 U* | 1 U* | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U* | 1 U | 1 U* | 1 U | 1 U* | 2 U | 1 U* | 2 U | 1 U* | 1 U* | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | **1.9** | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 1 U | 1 U | 1 U | **1.2 DJ** | **2** | 2 U | **0.66 J** | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **23** | **28.2** | **0.66 J** | 1 U | 1 U | **192 D** | **160** | **346** | **80** | 1 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | **0.62 J** | 1 U | 1 U | 1 U | 1 U | **11.1 D** | **15** | **29.6** | **25** | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 1 U | 5 U | 1 U | 5 U | 2 U | 5 U | 2 U | 5 U | 5 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | **3.8** | 1 U | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | 1 U | 1 U | 1 U | **23.8 D** | **8.2** | **4.31** | **1.9** | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 1 U | 5 U | 1 U | 5 U | 2 U | 5 U | 2 U | 5 U | 5 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 2 U | 1 U | 2 U | 1 U | 4 U | 1 U | 4 U | 1 U | 1 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | **2.13** | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | 5 U | NA | 5 U | NA | 5 U | NA | 5 U | 5 U | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 1 U | 5 U | 2 U | 5 U | 4 U | 5 U | 2 U | 5 U | 5 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **4.9** | **5.06** | **1** | **1.41** | 1 U | **42 D** | **330** | **40.3** | **0.72 J** | 1 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Supplemental | 67 |
| | | | Location Name | GPEC-MW339I | GPEC-MW339D | GPEC-MW339D | GPEC-MW344S | GPEC-MW344S | GPEC-MW344I | GPEC-MW344I | GPEC-MW344D | GPEC-MW344D | GPEC-MW344D | |
| | | | Sample Name | GPEC-MW339I | GPEC-MW-339D | GPEC-MW339D | GPEC-MW-344S | GPEC-MW344S | GPEC-MW-344I | GPEC-MW344I | GPEC-MW-344D | GPEC-MW344D | GPEC-MW904 | GPEC-MW905 |
| | | | Screen Zone | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow |
| | | | Sample Date | 10/30/2024 | 12/8/2015 | 10/30/2024 | 12/23/2015 | 11/14/2024 | 12/23/2015 | 11/14/2024 | 12/9/2015 | 11/14/2024 | 11/14/2024 | 11/21/2024 |
| | | | Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **5** | **8.73** | **0.41 J** | **0.424 J** | 1 U | **38.8 D** | **130** | **382** | **2.6** | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | 1 U | 1 U | **1.64 DJ** | **1.8** | **13.3** | **0.54 J** | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **33.79** | **41.99** | **2.07** | **5.522** | ND | **312.858** | **647.63** | **931.45** | **128.12** | ND | ND |
| **PAHs** | µg/L | | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | **1.11** | **4 J** | 10 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | **8.3 J** | 10 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 1 U | 10 U | **0.36 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | **0.618 J** | 10 U | 10 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | **2.29** | 10 U | 10 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | **17.2** | 2 U | 2 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | **0.837 J** | 10 U | 10 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 10 U | **1.4** | 10 U | **0.391 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 1 U | 1 U | **0.185** | 1 U | **0.11** | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 1 U | 1 U | **0.161** | 1 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 1 U | 2 U | **0.15** | 2 U | 0.1 U | 2 U | 1 U | 2 U | 2 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 1 U | 1 U | **0.102** | 1 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 2 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 1 U | 2 U | **0.123** | 2 U | **0.108** | 2 U | 1 U | 2 U | 2 U | 2 U |
| Total PAHs | | TPAH | NE | ND | **1.4** | ND | **1.472** | ND | **0.218** | ND | **22.055** | **12.3** | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| Aniline | | 62-53-3 | 5 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | 2 U | NA | 2 U* | NA | 2 U* | NA | 2 U* | 2 U* | 2 U |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | 1 R | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 2 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| Carbazole | | 86-74-8 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 10 U | 20 U | 10 U | 20 U | 10 U | 20 U | 10 U | 20 U | 20 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 10 U | 40 U | 10 U | 40 U | 10 U | 40 U | 10 U | 40 U | 40 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 2 U | 2 U |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 1 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U | 1 U | 1 U | 1 U | 1 U |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Supplemental | 67 |
| | | | Location Name | GPEC-MW339I | GPEC-MW339D | GPEC-MW339D | GPEC-MW344S | GPEC-MW344S | GPEC-MW344I | GPEC-MW344I | GPEC-MW344D | GPEC-MW344D | GPEC-MW344D | |
| | | | Sample Name | GPEC-MW339I | GPEC-MW-339D | GPEC-MW339D | GPEC-MW-344S | GPEC-MW344S | GPEC-MW-344I | GPEC-MW344I | GPEC-MW-344D | GPEC-MW344D | GPEC-MW904 | GPEC-MW905 |
| | | | Screen Zone | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow |
| | | | Sample Date | 10/30/2024 | 12/8/2015 | 10/30/2024 | 12/23/2015 | 11/14/2024 | 12/23/2015 | 11/14/2024 | 12/9/2015 | 11/14/2024 | 11/14/2024 | 11/21/2024 |
| | | | Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U | 10 U* |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 2 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 20 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U | 1 U | 20 U | 20 U | 20 U |
| Phenol | | 108-95-2 | 1 | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U | 10 U | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | **1.4** | ND | **1.472** | ND | **0.218** | ND | **22.055** | **12.3** | ND | ND |
| **PFAS** | | | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | ng/L | 763051-92-9 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | 37.9 U | NA | 116 U | NA | 86.2 U | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | 37.9 U | NA | 116 U | NA | 86.2 U | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | 7.58 U | NA | 23.1 U | NA | 17.2 U | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | 15.2 U | NA | 46.3 U | NA | 34.5 U | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | 15.2 U | NA | 46.3 U | NA | 34.5 U | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | 3.03 U | NA | 9.26 U | NA | 6.9 U | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | 3.03 U | NA | 9.26 U | NA | 6.9 U | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | 3.03 U | NA | 9.26 U | NA | 6.9 U | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | 3.03 U | NA | 9.26 U | NA | 6.9 U | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | **4.62** | NA | **3.82 J** | NA | **1.27 J** | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | **12.4** | NA | **11.1 J** | NA | **5.19 J** | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | **8.18** | NA | **14.3** | NA | **7.01** | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | **11.8** | NA | **17.8** | NA | **5.63** | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | **12.6** | NA | **17.8** | NA | **4.83 J** | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | 1.52 U | NA | 4.63 U | NA | 3.45 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | 6.07 U | NA | 18.5 U | NA | 13.8 U | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | **2.28** | NA | **11.3** | NA | **6.31** | NA | NA |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | **1.82** | NA | **3.37 J** | NA | 3.45 U | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | **3.9** | NA | **27.4** | NA | **8.55** | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | **73** | NA | **80.2** | NA | **40** | NA | NA |

**Table 15. Groundwater Analytical Results Maspeth Alignment**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 | Area 5 |
| | | | Investigation Phase | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Phase 2 | Supplemental | Supplemental | 67 |
| | | | Location Name | GPEC-MW339I | GPEC-MW339D | GPEC-MW339D | GPEC-MW344S | GPEC-MW344S | GPEC-MW344I | GPEC-MW344I | GPEC-MW344D | GPEC-MW344D | | |
| | | | Sample Name | GPEC-MW339I | GPEC-MW-339D | GPEC-MW339D | GPEC-MW-344S | GPEC-MW344S | GPEC-MW-344I | GPEC-MW344I | GPEC-MW-344D | GPEC-MW344D | GPEC-MW904 | GPEC-MW905 |
| | | | Screen Zone | Intermediate | Deep | Deep | Shallow | Shallow | Intermediate | Intermediate | Deep | Deep | Shallow | Shallow |
| | | | Sample Date | 10/30/2024 | 12/8/2015 | 10/30/2024 | 12/23/2015 | 11/14/2024 | 12/23/2015 | 11/14/2024 | 12/9/2015 | 11/14/2024 | 11/14/2024 | 11/21/2024 |
| | | | Parent Sample Code | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.4 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | NA | 40 U | 40 U | 40 U |
| Antimony | | 7440-36-0 | 3 | 2 U | NA | 2 U | NA | **1.1 J** | NA | 2 U | NA | 2 U | **0.72 J** | **0.89** |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | 2 U | NA | **2** | NA | 2 U | NA | **1.7 J** | **2.7** | **4.4** |
| Barium | | 7440-39-3 | 1000 | **208** | NA | **65.6** | NA | **98.3** | NA | **71.8** | NA | **69.4** | **173** | **135** |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | 0.8 U | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | 2 U |
| Calcium | | 7440-70-2 | NE | **128000** | NA | **174000** | NA | **190000** | NA | **58500** | NA | **139000** | **437000** | **174000** |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | 4 U | 4 U |
| Cobalt | | 7440-48-4 | NE | **1 J** | NA | **1.1 J** | NA | **0.44 J** | NA | **4.4** | NA | 4 U | **0.45 J** | **0.52** |
| Copper | | 7440-50-8 | 200 | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | 4 U | 4 U |
| Iron | | 7439-89-6 | 300 | 120 U | NA | 120 U | NA | 120 U | NA | 120 U | NA | 120 U | **121** | 120 U |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | 1.2 U | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | **19600** | NA | **17100** | NA | **11500** | NA | **48100** | NA | **78900** | **34300** | **17200** |
| Manganese | | 7439-96-5 | 300 | **3190** | NA | **1040** | NA | **483** | NA | **3120** | NA | **3510** | **248** | **1130** |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | 0.2 U | 0.2 U |
| Nickel | | 7440-02-0 | 100 | **3 J** | NA | **3 J** | NA | 4 U | NA | **3.9 J** | NA | 4 U | 4 U | 4 U |
| Potassium | | 7440-09-7 | NE | **7300** | NA | **11400** | NA | **7450** | NA | **14100** | NA | **15400** | **20500** | **10500** |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | 2.5 U | NA | **0.56 J** | NA | 2.5 U | NA | 2.5 U | **0.46 J** | 2.5 U |
| Silver | | 7440-22-4 | 50 | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **96200** | NA | **316000** | NA | **21000** | NA | **190000** | NA | **389000** | **63600** | **31000** |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | 0.8 U | 0.8 U |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U | 4 U | 4 U |
| Zinc | | 7440-66-6 | 2000* | 16 U | NA | 16 U | NA | **10.5 J** | NA | 16 U | NA | 16 U | 16 U | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **430** | NA | **646** | NA | **412** | NA | **347** | NA | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | **1.16 J** | NA | **3.53** | NA | **1.21 J** | NA | **3.83** | NA | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | **62.8** | NA | **87.3** | NA | **60.1** | NA | **208** | NA | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | **234000** | NA | **85900** | NA | **21200** | NA | **47000** | NA | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | **2.45** | NA | **2.27** | NA | 2 U | NA | **2.3** | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | **3.56** | NA | **9.06** | NA | **4.99** | NA | **2 J** | NA | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | **5320** | NA | **7620** | NA | **3310** | NA | **1860** | NA | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | **11.6** | NA | **42.4** | NA | **6.55** | NA | **8.88** | NA | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | **15800** | NA | **6760** | NA | **18400** | NA | **32100 J** | NA | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | **1020** | NA | **1430** | NA | **1220** | NA | **568 J** | NA | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | **2.08** | NA | 2 U | NA | **1.5 J** | NA | 2 UJ | NA | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | **10200** | NA | **4370** | NA | **6180** | NA | **15700 J** | NA | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | **147000** | NA | **6330** | NA | **74200** | NA | **470000** | NA | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | **1.75 J** | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | **2.15** | NA | **3.23** | NA | 2 U | NA | 2 U | NA | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | **12.3** | NA | **25.4** | NA | **11.2** | NA | **7 J** | NA | NA | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | 5 U | NA | 5 U | NA | 5 U | NA | 5 U | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 200 | NA | **11 J** | NA | **19 J** | NA | 20 U | NA | **30** | NA | NA | NA |
| **Other** | µg/L | | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| Investigation Phase | | | | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI | Phase 1 |
| Location Name | | | | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-2 |
| Sample Name | | | | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-02 |
| Screen Zone | | | | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow |
| Sample Date | | | | 12/5/2011 | 12/17/2012 | 45616.4375 | 12/17/2012 | 11/20/2024 | 12/17/2012 | 11/20/2024 | 7/16/2009 | 12/14/2012 |
| Parent Sample Code | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **19** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Toluene | | 108-88-3 | 5 | **3.6** | 1 U | **0.59 J** | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Ethylbenzene | | 100-41-4 | 5 | **5.3** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| o-Xylene | | 95-47-6 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Total Xylene | | 1330-20-7 | 5 | **7.4** | 2 U | NA | 2 U | NA | 2 U | NA | 100 U | 10 U |
| Total BTEX | | TBTEX | NE | **35.3** | ND | **0.59** | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 20 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 200 U | 25 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | 20 U | NA | 20 U | NA | 20 U | NA | NA | R |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | 20 U | NA | 20 U | NA | NA | 100 U |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Bromoform | | 75-25-2 | 50* | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Bromomethane | | 74-83-9 | 5 | 2 UJ | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 UJ | 5 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Chlorobenzene | | 108-90-7 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Chloroethane | | 75-00-3 | 5 | **39 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | R |
| Chloroform | | 67-66-3 | 7 | 2 U | 1 U | **1.1** | **0.804 J** | **1.4** | 1 U | **1.1** | 100 U | 5 U |
| Chloromethane | | 74-87-3 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 5 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **25** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 2 U | **607 D** | 1 U | **0.474 J** | 1 U | 1 U | 1 U | 100 U | 5 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | **0.68 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 2 U | 1 U | 1 U | **0.506 J** | **1.1** | 1 U | 1 U | 100 U | **2.51 J** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 2 U | 1 U | **0.35 J** | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 5 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 100 U | 10 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 5 U |
| 2-Hexanone | | 591-78-6 | 50* | 20 UJ | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U | 200 U | 10 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 5 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 20 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 200 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 100 U | 10 U |
| Styrene | | 100-42-5 | 5 | **0.91 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Methyl acetate | | 79-20-9 | NE | **NA** | NA | 5 U | NA | 5 U | NA | 5 U | NA | NA |
| Methylcyclohexane | | 108-87-2 | NE | **NA** | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 20 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 200 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Tetrachloroethene | | 127-18-4 | 5 | 2 U | 1 U | 1 U | **5.57** | **3.5** | **0.549 J** | 1 U | **3200** | **549 J** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 5 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-2 |
| | | | Sample Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-02 |
| | | | Screen Zone | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/5/2011 | 12/17/2012 | 45616.4375 | 12/17/2012 | 11/20/2024 | 12/17/2012 | 11/20/2024 | 7/16/2009 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 5 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Trichloroethene | | 79-01-6 | 5 | 2 U | 1 U | 1 U | **1.16** | **0.72 J** | 1 U | 1 U | **49 J** | **12.1** |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 5 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 5 U |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 5 U |
| Vinyl chloride | | 75-01-4 | 2 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 100 U | 5 U |
| Total VOCs | | TVOC | NE | **100.89** | **607** | **2.04** | **8.514** | **6.72** | **0.549** | **1.1** | **3249** | **563.61** |
| **PAHs** | µg/L | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | **59** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Fluorene | | 86-73-7 | 50* | **12 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | **25** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Naphthalene | | 91-20-3 | 10* | **470** | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 4 U | 1 U |
| Phenanthrene | | 85-01-8 | 50* | **11 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Pyrene | | 129-00-0 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 2 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 2 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 4 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 2 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 20 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 4 U | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 2 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 4 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 4 U | 0.1 U |
| Total PAHs | | TPAH | NE | **577** | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | NA | NA | NA | NA | NA | 4 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 20 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 4 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| Carbazole | | 86-74-8 | NE | **9.2 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 5 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | **19 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 20 U | NA | NA | NA | NA | NA | NA | 4 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 20 U | NA | NA | NA | NA | NA | NA | 4 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 20 U | NA | NA | NA | NA | NA | NA | 4 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 41 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | **9.8 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 61 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 25 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 61 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U | 25 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4.1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4.1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 4 U | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-2 |
| | | | Sample Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-02 |
| | | | Screen Zone | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/5/2011 | 12/17/2012 | 45616.4375 | 12/17/2012 | 11/20/2024 | 12/17/2012 | 11/20/2024 | 7/16/2009 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 2 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U | 4 U | 0.02 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 4 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | **9.4 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 41 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 41 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 41 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 61 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 10 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 61 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U | 25 U | 0.1 U |
| Phenol | | 108-95-2 | 1 | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 2 U | NA | NA | NA | NA | NA | NA | 4 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 10 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 20 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 4 U | 1 U |
| Total SVOCs | | TSVOC | NE | **624.4** | ND | ND | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | 43.4 U | NA | 79 U | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | 43.4 U | NA | 79 U | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | 8.69 U | NA | 15.8 U | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | 17.4 U | NA | 31.6 U | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | 17.4 U | NA | 31.6 U | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | 3.47 U | NA | 6.32 U | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | 3.47 U | NA | 6.32 U | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | 3.47 U | NA | 6.32 U | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | 3.47 U | NA | 6.32 U | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | **2.86** | NA | **4.53** | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | **13.3** | NA | **13.5** | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | **4.96** | NA | **9.21** | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | **4.47** | NA | **9.38** | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | **5.16** | NA | **10.1** | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | 1.74 U | NA | 3.16 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | 6.95 U | NA | 12.6 U | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | **3.31** | NA | **6.1** | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 3 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 |
| | | | Investigation Phase | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-2 |
| | | | Sample Name | GPEC-MW201 | GPEC-MW219D | GPEC-MW219D | GPEC-MW219I | GPEC-MW219I | GPEC-MW219S | GPEC-MW219S | MW-2 | MW-02 |
| | | | Screen Zone | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 12/5/2011 | 12/17/2012 | 45616.4375 | 12/17/2012 | 11/20/2024 | 12/17/2012 | 11/20/2024 | 7/16/2009 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | **1.85** | NA | **3.56** | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | **5.16** | NA | **14** | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | **42.6** | NA | **78.1** | NA | NA | NA | NA |
| **PCBs** | µg/L | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.53 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.53 UJ | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | NA | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND | ND | 0.05 U |
| **Dissolved Metals** | µg/L | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | 40 U | NA | 40 U | NA | 40 U | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | **155** | NA | **97.4** | NA | **36.2** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | **187000** | NA | **163000** | NA | **76300** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | **8.1** | NA | **3.7 J** | NA | **11.7** | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | 4 U | NA | **2.5 J** | NA | **40.2** | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | **1840** | NA | 120 U | NA | **162** | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **92500** | NA | **16100** | NA | **14200** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | **6880** | NA | **1080** | NA | **3380** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | **3.8 J** | NA | **14.3** | NA | **29.9** | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | **10800** | NA | **4150** | NA | **4510** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | 2.5 U | NA | **3.6** | NA | **4.7** | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **543000** | NA | **116000** | NA | **41100** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | 16 U | NA | 16 U | NA | **48.2** | NA | NA |
| **Total Metals** | µg/L | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **432** | **1980** | NA | **268** | NA | **424** | NA | **184 J** | **85.7** |
| Antimony | | 7440-36-0 | 3 | **10.8** | 4 U | NA | 4 U | NA | 4 U | NA | 15 U | 4 U |
| Arsenic | | 7440-38-2 | 25 | **15.8** | **1.72 J** | NA | 2 U | NA | 2 U | NA | 15 U | 2 U |
| Barium | | 7440-39-3 | 1000 | **61.1 J** | **179** | NA | **37.4 J** | NA | **62.9** | NA | **43.7** | **46.3** |
| Beryllium | | 7440-41-7 | 3* | **2.2** | 2 U | NA | 2 U | NA | 2 U | NA | 5 U | 2 U |
| Cadmium | | 7440-43-9 | 5 | 5 U | 2 U | NA | 2 U | NA | 2 U | NA | 5 U | 2 U |
| Calcium | | 7440-70-2 | NE | **9010** | **207000** | NA | **73600** | NA | **81300** | NA | **73600** | **123000** |
| Chromium | | 7440-47-3 | 50 | 10 U | **4.35 J** | NA | 8 U | NA | 8 U | NA | **0.63 J** | 8 U |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | 10 UJ | NA |
| Cobalt | | 7440-48-4 | NE | 50 U | **5.86 J** | NA | 8 U | NA | **4.09 J** | NA | **1.6 J** | 8 U |
| Copper | | 7440-50-8 | 200 | **22 J** | 8 U | NA | 8 U | NA | 8 U | NA | 10 U | 8 U |
| Iron | | 7439-89-6 | 300 | **1870** | **20200** | NA | **1700** | NA | **2780** | NA | **487** | **185** |
| Lead | | 7439-92-1 | 25 | **26.1** | **7.37** | NA | 2 U | NA | **0.666 J** | NA | 15 U | **8.32** |
| Magnesium | | 7439-95-4 | 35000* | **10300** | **112000** | NA | **15700** | NA | **10700** | NA | **31500** | **39200** |
| Manganese | | 7439-96-5 | 300 | **41.5** | **6730** | NA | **548** | NA | **1320** | NA | **86.5** | **26** |
| Mercury | | 7439-97-6 | 0.7 | **0.16 J** | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA | 0.2 U | 0.5 U |
| Nickel | | 7440-02-0 | 100 | 40 U | **4.32** | NA | **4.89** | NA | **11.6** | NA | **3 J** | **2.83 J** |
| Potassium | | 7440-09-7 | NE | **377000** | **12900** | NA | **2620** | NA | **3630** | NA | **2680** | **2700** |
| Selenium | | 7782-49-2 | 10 | 10 U | 8 U | NA | 8 U | NA | **5.94 J** | NA | 38 UJ | **6.29 J** |
| Silver | | 7440-22-4 | 50 | 10 U | 2 U | NA | 2 U | NA | 2 U | NA | 5 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **137000** | **413000** | NA | **66900** | NA | **12200** | NA | **95000** | **42000** |
| Thallium | | 7440-28-0 | 0.5* | **6.2 J** | 2 U | NA | 2 U | NA | 2 U | NA | 15 U | 2 U |
| Vanadium | | 7440-62-2 | NE | **5840** | **5.31 J** | NA | 8 U | NA | 8 U | NA | **3.7 J** | 8 U |
| Zinc | | 7440-66-6 | 2000* | **30.3** | **22.5** | NA | **6.29 J** | NA | **31.8** | NA | 25 U | **6.89 J** |
| **Cyanides** | µg/L | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 5 U | 2 U | NA | 2 U | NA | 2 U | NA | 10 U | 2 U |
| Total Cyanide | | 57-12-5 | 200 | **8.7 J** | **46** | NA | **52** | NA | **113** | NA | **4.2 J** | 20 U |
| **Other** | µg/L | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Supplemental | Supplemental | Phase 3 | Supplemental | Phase 3 | Phase 3 | PDI | Phase 1 | Supplemental | PDI |
| | | | | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-7D |
| | | | | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW06 | GPEC-MW-6 | GPEC-MW-7D |
| | | | | Shallow | Deep | Deep | Deep | Shallow | Deep | Shallow | Shallow | Shallow | Deep |
| | | | | 11/8/2024 | 11/8/2024 | 6/18/2019 | 11/20/2024 | 6/18/2019 | 6/18/2019 | 7/28/2009 | 12/19/2012 | 11/14/2024 | 7/27/2009 |
| | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | NA | NA | 1 U | NA |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | NA | 1 U | NA |
| Total Xylene | | 1330-20-7 | 5 | NA | NA | 1 U | NA | 1 U | 1 U | 5 U | 2 U | NA | 5 U |
| Total BTEX | | TBTEX | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | **70.6** | 5 U | 2 U | 2 U | 10 U | 2 U | 5 U | 10 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | 10 R | NA | 10 R | 10 R | NA | 20 U | NA | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | 10 UJ | NA | 10 UJ | 10 UJ | NA | 20 U | NA | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U* | 5 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U* | 5 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 UJ | 1 U | 1 U | 5 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | 2 U | NA | 2 U | 2 U | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U* | 5 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 UJ | 1 U | 1 U | 5 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | 2 U | NA | 2 U | 2 U | NA | 1 U | NA | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 0.5 U | 1 U | **1.4** | 0.5 U | 5 U | 1 U | 1 U | **0.69** |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U* | 5 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 UJ | 1 U | NA | 1 U | 1 U | NA |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | **0.666** | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | **1.3** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | **21** | **548** | **67** | **1.15 J** | **293** | 5 U | 1 U | 1 U | **9.8** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **0.76 J** | 1 U | **0.691** | **1.9** | **0.639** | **0.601** | 5 U | 1 U | 1 U | **1.4** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | 0.5 U | **0.25 J** | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | 0.5 U | NA | 0.5 U | 0.5 U | NA | 1 U | NA | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 5 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 5 U | 10 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | 0.5 U | **0.39 J** | 0.5 U | 0.5 U | NA | 1 U | 1 U | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 5 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 5 U | 10 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 2 U | 1 U | 5 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | 5 U | NA | 5 U | NA | NA | NA | NA | 5 U | NA |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | 1 U | NA | 1 U | NA | NA | NA | NA | 1 U | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 5 U | **89** | 5 U | 2 U | 2 U | 10 U | 1 U | 5 U | 10 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U |
| Tetrachloroethene | | 127-18-4 | 5 | **54** | 1 U | **1.59** | **3.3** | **132 J** | **4.15** | 5 U | 1 U | 1 U | **25** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U* | 1 U* | NA | 1 U | NA | NA | NA | NA | 1 U | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Supplemental | Phase 3 | Supplemental | Phase 3 | Phase 3 | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Sample Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW06 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Screen Zone | Shallow | Deep | Deep | Deep | Shallow | Deep | Shallow | Shallow | Shallow | Deep |
| | | | Sample Date | 11/8/2024 | 11/8/2024 | 6/18/2019 | 11/20/2024 | 6/18/2019 | 6/18/2019 | 7/28/2009 | 12/19/2012 | 11/14/2024 | 7/27/2009 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U* | 1 U* | 1 U | 1 U | 1 U | 1 U | NA | 1 U | 1 U | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | 5 U | 1 U | 1 U | 5 U |
| Trichloroethene | | 79-01-6 | 5 | **2.2** | 1 U | **0.748** | **0.76 J** | **2.43** | **1.64** | 5 U | 1 U | 1 U | **4.3** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | 0.5 U | 1 U | 0.5 U | 0.5 U | NA | 1 U | 1 U | NA |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U |
| Total VOCs | | TVOC | NE | **56.96** | **21** | **711.295** | **73.6** | **137.619** | **299.391** | ND | ND | ND | **42.49** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | **1.17** | 2 U | 4.2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | **0.53 J** | 1 U | 10 U | 4.2 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 0.1 U | 1 U | 4.2 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 0.1 U | 1 U | 4.2 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 0.1 U | 2 U | 4.2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 0.1 U | 1 U | 4.2 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 1 U | 2 U | 4.2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 0.1 U | 1 U | 4.2 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 0.1 U | 2 U | 4.2 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | ND | ND | **0.53** | **1.17** | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U* | 2 U* | NA | 2 U | NA | NA | NA | NA | 2 U* | NA |
| Benzaldehyde | | 100-52-7 | NE | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | 10 U | NA | 10 U | 10 U | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | 1 U | NA | 1 U | 1 U | 4.2 U | NA | NA | 4.2 U |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.2 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 1 U | 2 U | 4.2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Caprolactam | | 105-60-2 | NE | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 5.2 U | 1 U | 10 U | 5.2 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | 1 U | NA | 1 U | 1 U | 4.2 U | NA | NA | 4.2 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | 1 U | NA | 1 U | 1 U | 4.2 U | NA | NA | 4.2 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | 1 U | 1 U | 4.2 U | NA | NA | 4.2 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 10 U | **0.316 J** | 10 U | 1 U | **0.224 J** | 4.2 U | 1 U | 10 U | 4.2 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 20 U | 1 U | 20 U | 1 U | 1 U | 26 U | 1 U | 20 U | 26 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 40 U | 1 U | 40 U | 1 U | 1 U | 26 U | 1 U | 40 U | 26 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 1 U | 2 U | 4.2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Supplemental | Phase 3 | Supplemental | Phase 3 | Phase 3 | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Sample Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW06 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Screen Zone | Shallow | Deep | Deep | Deep | Shallow | Deep | Shallow | Shallow | Shallow | Deep |
| | | | Sample Date | 11/8/2024 | 11/8/2024 | 6/18/2019 | 11/20/2024 | 6/18/2019 | 6/18/2019 | 7/28/2009 | 12/19/2012 | 11/14/2024 | 7/27/2009 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 10 U | **2.8** | 10 U | 1 U | **0.649 J** | 4.2 U | 1 U | 10 U | 4.2 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 0.02 U | 1 U | 4.2 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.2 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 2 U | 1 U | 2 U | 1 U | 1 U | 4.2 U | 1 U | 2 U | 4.2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.2 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 20 U | 1 U | 20 U | 1 U | 1 U | 10 U | 1 U | 20 U | 10 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.2 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 20 U | 1 U | 20 U | 1 U | 1 U | 26 U | 0.1 U | 20 U | 26 U |
| Phenol | | 108-95-2 | 1 | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | 1 U | NA | 1 U | 1 U | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 1 U | NA | 1 U | 1 U | 4.2 U | NA | NA | 4.2 U |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | 10 U | NA | 10 U | NA | NA | NA | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 10 U | 1 U | 10 U | 1 U | 1 U | 4.2 U | 1 U | 10 U | 4.2 U |
| Total SVOCs | | TSVOC | NE | ND | ND | **3.116** | ND | ND | **0.873** | **0.53** | **1.17** | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | 41.4 U | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | 41.4 U | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | 8.28 U | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | 16.6 U | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | 16.6 U | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | 3.31 U | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | 3.31 U | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | 3.31 U | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | 3.31 U | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | **1.4 J** | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | **8.02** | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | **8.88** | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | **5.3** | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | **0.51 J** | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | **5.08** | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | 1.66 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | 6.62 U | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | **3.98** | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 6 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | Supplemental | Phase 3 | Supplemental | Phase 3 | Phase 3 | PDI | Phase 1 | Supplemental | PDI |
| | | | Location Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Sample Name | MW-2 | MW-2D | GPEC-MW502 | GPEC-MW502 | GPEC-MW505S | GPEC-MW505D | GPEC-MW-6 | GPEC-MW06 | GPEC-MW-6 | GPEC-MW-7D |
| | | | Screen Zone | Shallow | Deep | Deep | Deep | Shallow | Deep | Shallow | Shallow | Shallow | Deep |
| | | | Sample Date | 11/8/2024 | 11/8/2024 | 6/18/2019 | 11/20/2024 | 6/18/2019 | 6/18/2019 | 7/28/2009 | 12/19/2012 | 11/14/2024 | 7/27/2009 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | **3.63** | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | **7.08** | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | **51.4** | NA | NA | NA | NA | NA | NA |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.4 U* | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.4 U | 0.52 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | 0.4 U | NA | 0.4 U | NA | NA | NA | 0.05 U | 0.4 U | NA |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | 0.4 U | NA | 0.4 U | NA | NA | NA | 0.05 U | 0.4 U | NA |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | 0.05 U | ND | 0.05 U | 0.05 U | ND | 0.05 U | ND | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | 40 U | NA | 40 U | NA | NA | NA | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 2 U | 2 U | NA | 2 U | NA | NA | NA | NA | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | 2 U | NA | 2 U | NA | NA | NA | NA | **2.6** | NA |
| Barium | | 7440-39-3 | 1000 | **54.4** | **60** | NA | **26.4** | NA | NA | NA | NA | **177** | NA |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | 0.8 U | NA | 0.8 U | NA | NA | NA | NA | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | 2 U | NA | 2 U | NA | NA | NA | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **123000** | **68600** | NA | **126000** | NA | NA | NA | NA | **67700** | NA |
| Chromium | | 7440-47-3 | 50 | 4 U | 4 U | NA | 4 U | NA | NA | NA | NA | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | **1.9 J** | 4 U | NA | **0.68 J** | NA | NA | NA | NA | **1.1 J** | NA |
| Copper | | 7440-50-8 | 200 | 4 U | 4 U | NA | 4 U | NA | NA | NA | NA | 4 U | NA |
| Iron | | 7439-89-6 | 300 | **37.3 J** | **686** | NA | **208** | NA | NA | NA | NA | 120 U | NA |
| Lead | | 7439-92-1 | 25 | 1.2 U | 1.2 U | NA | 1.2 U | NA | NA | NA | NA | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **38500** | **47900** | NA | **86700** | NA | NA | NA | NA | **16600** | NA |
| Manganese | | 7439-96-5 | 300 | **22** | **330** | NA | **681** | NA | NA | NA | NA | **2520** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | 0.2 U | NA | 0.2 U | NA | NA | NA | NA | 0.2 U | NA |
| Nickel | | 7440-02-0 | 100 | **3.7 J** | 4 U | NA | **2.2 J** | NA | NA | NA | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **3110** | **13300** | NA | **7180** | NA | NA | NA | NA | **12300** | NA |
| Selenium | | 7782-49-2 | 10 | **10.6** | 2.5 U | NA | 2.5 U | NA | NA | NA | NA | 2.5 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | 2 U | NA | 2 U | NA | NA | NA | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **58100** | **198000** | NA | **244000** | NA | NA | NA | NA | **251000** | NA |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | 0.8 U | NA | 0.8 U | NA | NA | NA | NA | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | 4 U | 4 U | NA | 4 U | NA | NA | NA | NA | 4 U | NA |
| Zinc | | 7440-66-6 | 2000* | 16 U | 16 U | NA | 16 U | NA | NA | NA | NA | 16 U | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | **193** | NA | **24.2** | **253** | **113 J** | **55.6** | NA | **395** |
| Antimony | | 7440-36-0 | 3 | NA | NA | 2 U | NA | 2 U | 2 U | 15 U | 4 U | NA | 15 U |
| Arsenic | | 7440-38-2 | 25 | NA | NA | **1.45 J** | NA | 2 U | **2.44** | 15 U | **2.03** | NA | 15 U |
| Barium | | 7440-39-3 | 1000 | NA | NA | **41.6** | NA | **93** | **56.9** | **230** | **288** | NA | **145** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 1 U | NA | 1 U | 1 U | 5 U | 2 U | NA | 5 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | 2 U | 2 U | 5 U | **1.53 J** | NA | 5 U |
| Calcium | | 7440-70-2 | NE | NA | NA | **177000** | NA | **141000** | **123000** | **111000** | **365000** | NA | **280000** |
| Chromium | | 7440-47-3 | 50 | NA | NA | **3.96** | NA | 2 U | **2.83** | 5 U | 8 U | NA | 5 U |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | **4 J** | NA | NA | **11** |
| Cobalt | | 7440-48-4 | NE | NA | NA | **3.5** | NA | **1.9 J** | **0.971 J** | **1.2 J** | **7.15 J** | NA | **4 J** |
| Copper | | 7440-50-8 | 200 | NA | NA | **1.69 J** | NA | 2 U | 2 U | **2.1 J** | 8 U | NA | **2.1 J** |
| Iron | | 7439-89-6 | 300 | NA | NA | **2220** | NA | **70.3 J** | **10000** | **3540** | **3980** | NA | **1220** |
| Lead | | 7439-92-1 | 25 | NA | NA | **1.23 J** | NA | 2 U | 2 U | 15 U | 2 U | NA | 15 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **129000** | NA | **35500** | **73800** | **13800** | **80400** | NA | **106000** |
| Manganese | | 7439-96-5 | 300 | NA | NA | **870** | NA | **350** | **341** | **4320** | **12300** | NA | **8360** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.5 U | NA | 0.5 U | 0.5 U | 0.4 U | 0.5 U | NA | 0.4 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | **11.3** | NA | **6.65** | 2 U | **1.4 J** | **7.72** | NA | **7.1** |
| Potassium | | 7440-09-7 | NE | NA | NA | **8490** | NA | **4910** | **6270** | **17300** | **26200** | NA | **36400** |
| Selenium | | 7782-49-2 | 10 | NA | NA | 20 U | NA | 20 U | 20 U | 38 U | 8 U | NA | 38 U |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | 2 U | 2 U | 5 U | 2 U | NA | 5 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **324000** | NA | **40000** | **298000** | **197000** | **810000** | NA | **511000** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 2 U | NA | 2 U | 2 U | 15 U | 2 U | NA | 15 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | **1.18 J** | NA | 2 U | **1.6 J** | 5 U | 8 U | NA | **1 J** |
| Zinc | | 7440-66-6 | 2000* | NA | NA | 20 U | NA | 20 U | **20** | 25 U | **9.46** | NA | **5.4 J** |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 10 U | 2 U | NA | 10 U |
| Total Cyanide | | 57-12-5 | 200 | **45.5** | **31.5** | **35** | **22.1** | **34** | **33** | **4.4 J** | 20 U | NA | 10 U |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| | | | Investigation Phase | Phase 1 | Phase 1 | PDI | Phase 1 | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-MW-7D | GPEC-MW-7D | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| | | | Sample Name | GPEC-MW07D | GPECXX122112 | GPEC-MW-10 | GPEC-MW10 | GPEC-XX121312 | GPEC-MW-11 | GPEC-MW11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| | | | Screen Zone | Deep | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep |
| | | | Sample Date | 12/21/2012 | 12/21/2012 | 7/24/2009 | 12/13/2012 | 12/13/2012 | 7/15/2009 | 12/17/2012 | 11/13/2024 | 8/30/2010 | 12/17/2012 |
| | | | Parent Sample Code | | GPEC-MW-7D | | | GPEC-MW10 | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | **0.348** | **0.336** | 5 U | 1 U | 1 U | **20** | **1.05** | 1 U | 5 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | **6.3** | 1 U | 1 U | 5 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | **39** | 1 U | 1 U | 5 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Total Xylene | | 1330-20-7 | 5 | 2 U | 2 U | 5 U | 2 U | 2 U | **20** | 2 U | NA | 5 U | 2 U |
| Total BTEX | | TBTEX | NE | **0.348** | **0.336** | ND | ND | ND | **85.3** | **1.05** | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | 10 U | 5 U | 5 U | 10 U | 5 U | 5 U | 10 UJ | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | 20 U | NA | R | R | NA | 20 U | NA | NA | 20 U |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | 20 U | NA | 20 U | 20 U | NA | 20 U | NA | NA | 20 U |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | **0.68 J** | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 UJ | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U* | 5 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **0.426** | **0.388** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | **0.859 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | **8.87** | **8.1** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **8.1** | **10.7** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **0.765** | **0.717** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 2 U | 5 U | 2 U | 2 U | 5 U | 2 U | 1 U | 5 U | 2 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| 2-Hexanone | | 591-78-6 | 50* | 2 U | 2 U | 10 U | 2 U | 2 U | 10 U | 2 U | 5 U | 10 U | 2 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 1 U | 10 U | 1 U | 1 U | 10 U | 1 U | 5 U | 10 U | 1 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 2 U | 5 U | 2 U | 2 U | 5 U | 2 U | 1 U | 5 U | 2 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | NA | NA | NA | NA | NA | 5 U | NA | NA |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 1 U | 10 U | 1 U | 1 U | 10 U | 1 U | 5 U | 10 U | 1 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **8.11** | **7.32** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | NA | NA | NA | NA | NA | 1 U | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 1 | PDI | Phase 1 | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| | | | Location Name | GPEC-MW-7D | GPEC-MW-7D | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| | | | Sample Name | GPEC-MW07D | GPECXX122112 | GPEC-MW-10 | GPEC-MW10 | GPEC-XX121312 | GPEC-MW-11 | GPEC-MW11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| | | | Screen Zone | Deep | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep |
| | | | Sample Date | 12/21/2012 | 12/21/2012 | 7/24/2009 | 12/13/2012 | 12/13/2012 | 7/15/2009 | 12/17/2012 | 11/13/2024 | 8/30/2010 | 12/17/2012 |
| | | | Parent Sample Code | | GPEC-MW-7D | | | GPEC-MW10 | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **1.95** | **1.68** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U |
| Total VOCs | | TVOC | NE | **20.469** | **18.541** | **0.68** | ND | ND | **85.3** | **1.05** | ND | **8.1** | **11.559** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 1 U | 4.2 U | 1 U | 1 U | **8** | **2.83** | 10 U | 4.2 U | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | **1.1 J** | 1 U | 10 U | 4.2 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | **0.32 J** | 1 U | 10 U | 4.2 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | **0.605** | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | **0.67 J** | 1 U | 10 U | 4.2 U | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 1 U | **0.62 J** | 1 U | 1 U | **2.6 J** | 1 U | 10 U | 4.2 U | 1 U |
| Naphthalene | | 91-20-3 | 10* | **2.12** | **1.47** | **0.99 J** | 1 U | 1 U | **52** | 1 U | 2 U | 4.2 U | 1 U |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 1 U | **0.44 J** | 1 U | 1 U | **1.4 J** | 1 U | 10 U | 4.2 U | 1 U |
| Pyrene | | 129-00-0 | 50* | **0.809** | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | **0.33** | **0.204** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | **0.331** | **0.207** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | **0.439** | **0.307** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 2 U | 4.2 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | **0.235** | **0.152** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | **0.115** | **0.113** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | **0.271** | **0.194** | 4.2 U | 0.1 U | 0.1 U | 4.4 U | 0.1 U | 2 U | 4.2 U | 0.1 U |
| Total PAHs | | TPAH | NE | **5.255** | **2.647** | **2.05** | ND | ND | **66.09** | **2.83** | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | NA | NA | NA | NA | NA | 2 U | NA | NA |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | 4.2 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| Carbazole | | 86-74-8 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | **0.56 J** | 1 U | 10 U | 4.2 U | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 1 U | 5.2 U | 1 U | 1 U | 5.5 U | 1 U | 10 U | 5.3 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | 4.2 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | 4.2 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 4.2 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | **0.51 J** | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 1 U | 26 U | 1 U | 1 U | 27 U | 1 U | 20 U | 26 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 1 U | 26 U | 1 U | 1 U | 27 U | 1 U | 40 U | 26 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| Investigation Phase | | | | Phase 1 | Phase 1 | PDI | Phase 1 | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| Location Name | | | | GPEC-MW-7D | GPEC-MW-7D | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| Sample Name | | | | GPEC-MW07D | GPECXX122112 | GPEC-MW-10 | GPEC-MW10 | GPEC-XX121312 | GPEC-MW-11 | GPEC-MW11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| Screen Zone | | | | Deep | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep |
| Sample Date | | | | 12/21/2012 | 12/21/2012 | 7/24/2009 | 12/13/2012 | 12/13/2012 | 7/15/2009 | 12/17/2012 | 11/13/2024 | 8/30/2010 | 12/17/2012 |
| Parent Sample Code | | | | | GPEC-MW-7D | | | GPEC-MW10 | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 0.02 U | 4.2 U | 0.02 U | 0.02 U | 4.4 U | 0.02 U | 1 U | 4.2 U | 0.02 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 1 U | 10 U | 1 U | 1 U | 11 U | 1 U | 20 U | 11 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 0.1 U | 26 U | 0.1 U | 0.1 U | 27 U | 0.1 U | 20 U | 26 U | 0.1 U |
| Phenol | | 108-95-2 | 1 | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | 4.2 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | NA | NA | NA | NA | NA | 10 U | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 1 U | 10 U | 1 U | 1 U | 11 U | 1 U | 10 U | 11 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 1 U | 4.2 U | 1 U | 1 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U |
| Total SVOCs | | TSVOC | NE | **5.255** | **2.647** | **2.05** | ND | ND | **66.65** | **2.83** | ND | **0.51** | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | 75.4 U | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | 75.4 U | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | 15.1 U | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | 30.2 U | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | 30.2 U | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | 6.03 U | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | 6.03 U | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | 6.03 U | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | 6.03 U | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | **2.85 J** | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | **9.91 J** | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | **1.78 J** | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | **8.28** | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | **7.89** | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | **6.71** | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | 3.02 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | 12.1 U | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | **0.84 J** | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Phase 1 | Phase 1 | PDI | Phase 1 | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 |
| Location Name | | | | GPEC-MW-7D | GPEC-MW-7D | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-10 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| Sample Name | | | | GPEC-MW07D | GPECXX122112 | GPEC-MW-10 | GPEC-MW10 | GPEC-XX121312 | GPEC-MW-11 | GPEC-MW11 | GPEC-MW-11 | GPEC-MW-11D | GPEC-MW11D |
| Screen Zone | | | | Deep | Deep | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Intermediate | Deep | Deep |
| Sample Date | | | | 12/21/2012 | 12/21/2012 | 7/24/2009 | 12/13/2012 | 12/13/2012 | 7/15/2009 | 12/17/2012 | 11/13/2024 | 8/30/2010 | 12/17/2012 |
| Parent Sample Code | | | | | GPEC-MW-7D | | | GPEC-MW10 | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | **5.13** | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | **5.56** | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | **28.9** | NA | NA |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.05 U | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.05 U | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.05 U | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.05 U | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 U | 0.05 U | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.05 U | 0.52 U | 0.05 UJ | 0.05 UJ | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | **0.69** | **0.92** | 0.52 U | 0.05 UJ | 0.05 UJ | 0.54 U | 0.05 U | 0.4 U | 0.53 U | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.05 U | NA | 0.05 UJ | 0.05 UJ | NA | 0.05 U | 0.4 U | NA | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.05 U | NA | 0.05 UJ | 0.05 UJ | NA | 0.05 U | 0.4 U | NA | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | **0.69** | **0.92** | ND | 0.05 UJ | 0.05 UJ | ND | 0.05 U | ND | ND | 0.05 U |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | NA | NA | NA | NA | NA | 40 U | NA | NA |
| Antimony | | 7440-36-0 | 3 | NA | NA | NA | NA | NA | NA | NA | 2 U | NA | NA |
| Arsenic | | 7440-38-2 | 25 | NA | NA | NA | NA | NA | NA | NA | **1.5 J** | NA | NA |
| Barium | | 7440-39-3 | 1000 | NA | NA | NA | NA | NA | NA | NA | **149** | NA | NA |
| Beryllium | | 7440-41-7 | 3* | NA | NA | NA | NA | NA | NA | NA | 0.8 U | NA | NA |
| Cadmium | | 7440-43-9 | 5 | NA | NA | NA | NA | NA | NA | NA | 2 U | NA | NA |
| Calcium | | 7440-70-2 | NE | NA | NA | NA | NA | NA | NA | NA | **191000** | NA | NA |
| Chromium | | 7440-47-3 | 50 | NA | NA | NA | NA | NA | NA | NA | 4 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | NA | NA | NA | NA | NA | NA | **1 J** | NA | NA |
| Copper | | 7440-50-8 | 200 | NA | NA | NA | NA | NA | NA | NA | **3.5 J** | NA | NA |
| Iron | | 7439-89-6 | 300 | NA | NA | NA | NA | NA | NA | NA | 120 U | NA | NA |
| Lead | | 7439-92-1 | 25 | NA | NA | NA | NA | NA | NA | NA | 1.2 U | NA | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | NA | NA | NA | NA | NA | **50700** | NA | NA |
| Manganese | | 7439-96-5 | 300 | NA | NA | NA | NA | NA | NA | NA | **1340** | NA | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | NA | NA | NA | NA | NA | 0.2 U | NA | NA |
| Nickel | | 7440-02-0 | 100 | NA | NA | NA | NA | NA | NA | NA | 4 U | NA | NA |
| Potassium | | 7440-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | **19700** | NA | NA |
| Selenium | | 7782-49-2 | 10 | NA | NA | NA | NA | NA | NA | NA | **0.48 J** | NA | NA |
| Silver | | 7440-22-4 | 50 | NA | NA | NA | NA | NA | NA | NA | 2 U | NA | NA |
| Sodium | | 7440-23-5 | 20000 | NA | NA | NA | NA | NA | NA | NA | **411000** | NA | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | NA | NA | NA | NA | NA | 0.8 U | NA | NA |
| Vanadium | | 7440-62-2 | NE | NA | NA | NA | NA | NA | NA | NA | 4 U | NA | NA |
| Zinc | | 7440-66-6 | 2000* | NA | NA | NA | NA | NA | NA | NA | **14.4 J** | NA | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **3000** | **1690** | **314** | **85.2 J** | **196 J** | **52.9 J** | **945** | NA | **127 J** | **47** |
| Antimony | | 7440-36-0 | 3 | **1.53** | **1.18** | 15 U | 4 U | 4 U | 15 U | 4 U | NA | 15 U | 4 U |
| Arsenic | | 7440-38-2 | 25 | **6.17** | **4.43** | 15 U | **7.51** | **9.4** | **10.9 J** | **10.8** | NA | **4.7 J** | **1.39 J** |
| Barium | | 7440-39-3 | 1000 | **186** | **175** | **95.1** | **109** | **125** | **65.9** | **59.2** | NA | **111** | **37.5 J** |
| Beryllium | | 7440-41-7 | 3* | 2 U | 2 U | 5 U | 2 U | 2 U | 5 U | 2 U | NA | 5 U | 2 U |
| Cadmium | | 7440-43-9 | 5 | **1.33** | **0.747** | 5 U | 2 U | **0.844 J** | 5 U | 2 U | NA | 5 U | 2 U |
| Calcium | | 7440-70-2 | NE | **131000** | **123000** | **136000** | **137000** | **143000** | **141000** | **178000** | NA | **242000** | **259000** |
| Chromium | | 7440-47-3 | 50 | **11.2** | **6.88** | 5 U | 8 U | 8 U | 5 U | **3.3 J** | NA | **1.8 J** | 8 U |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | **5.2 J** | NA | NA | 10 UJ | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | **5.14** | **3.34** | **1.1 J** | 8 U | 8 U | 5 U | 8 U | NA | **2.5 J** | **2.2 J** |
| Copper | | 7440-50-8 | 200 | **302** | **162** | 10 U | 8 U | 8 U | 10 U | 8 U | NA | **1.7 J** | 8 U |
| Iron | | 7439-89-6 | 300 | **7490** | **5090** | **6530** | **12200** | **13400** | **9580** | **6860** | NA | **3640** | **3330** |
| Lead | | 7439-92-1 | 25 | **371** | **219** | 15 U | **0.924 J** | **2.14** | 15 U | **5.53** | NA | 15 U | **1.32 J** |
| Magnesium | | 7439-95-4 | 35000* | **24900** | **27500** | **19500** | **16700** | **17400** | **29500** | **30000** | NA | **121000** | **141000** |
| Manganese | | 7439-96-5 | 300 | **913** | **1630** | **2140** | **1390** | **1440** | **2470** | **1080** | NA | **7120** | **5990** |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | 0.5 U | 0.2 U | 0.5 U | 0.5 U | 0.2 U | 0.5 U | NA | 0.4 U | 0.5 U |
| Nickel | | 7440-02-0 | 100 | **28.7** | **17.4** | **2.2 J** | **1.23 J** | **2.11 J** | 5 U | **1.92 J** | NA | **3.3 J** | **2.47 J** |
| Potassium | | 7440-09-7 | NE | **6920** | **6300** | **29400** | **19300** | **20000** | **15900** | **16800** | NA | **17600** | **15200** |
| Selenium | | 7782-49-2 | 10 | 8 U | 8 U | 38 U | 8 U | 8 U | 38 UJ | 8 U | NA | 38 UJ | 8 U |
| Silver | | 7440-22-4 | 50 | 2 U | 2 U | 5 U | 2 U | **0.693 J** | 5 U | 2 U | NA | 5 U | 2 U |
| Sodium | | 7440-23-5 | 20000 | **246000** | **265000** | **167000** | **200000** | **208000** | **269000** | **190000** | NA | **411000** | **429000** |
| Thallium | | 7440-28-0 | 0.5* | 2 U | 2 U | 15 U | 2 U | **0.948 J** | 15 U | 2 U | NA | 15 UJ | 2 U |
| Vanadium | | 7440-62-2 | NE | **15** | **8.4** | **1.3 J** | 8 U | 8 U | **5.3 J** | **5.42 J** | NA | **4.4 J** | 8 U |
| Zinc | | 7440-66-6 | 2000* | **290** | **163** | 25 U | **12** | **5.65 J** | 25 U | **18** | NA | 25 U | **9.14** |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | 2 U | 10 U | 2 U | **4** | 10 U | 2 U | 5 U | 10 U | 2 U |
| Total Cyanide | | 57-12-5 | 200 | 20 U | 20 U | **10.2** | 20 U | 20 U | **35.9** | **42** | **25.7** | 10 UJ | 20 U |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| Investigation Phase | | | | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| Location Name | | | | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| Sample Name | | | | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW12 | GPEC-MW12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| Screen Zone | | | | Deep | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow |
| Sample Date | | | | 11/13/2024 | 7/15/2009 | 12/17/2012 | 11/1/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 |
| Parent Sample Code | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | **19** | **19.6** | **15** | 1 U | 1 U | 1 U | 1 U | **63.7** | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | **1.7 J** | **1.81** | **1.9** | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | **7.1** | **5.32** | **6.3** | 1 U | 1 U | 1 U | 1 U | **10.2** | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | **11** | NA | 1 U | NA | 1 U | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | **10** | NA | 1 U | NA | 1 U | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | NA | **19** | **16.1** | NA | 2 U | NA | 2 U | NA | 10 U | NA |
| Total BTEX | | TBTEX | NE | ND | **46.8** | **42.83** | **44.2** | ND | ND | ND | ND | **73.9** | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 U | 5 U | 5 U | 5 U | 5 UJ | 5 U | 5 UJ | 25 U | 5 UJ |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | 20 U | NA | R | NA | R | NA | R | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | 20 U | NA | 20 U | NA | 20 U | NA | 100 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U* | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U* | 5 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | **0.642 J** | 1 U | 5 U | **250** |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U* | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | **0.485 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 5 U | 1 UJ |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 5 U | 1 U | 1 U | **1.12** | 1 U | 1 U | 1 U | 5 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | **0.41 J*** | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | 1 U* | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | **3.4 *** | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | 1 U* | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U* | 5 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 UJ | 1 U | 1 UJ | 5 U | 1 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **0.39 J** | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | **0.26 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | **5** | 5 U | **0.489 J** | 1 U | **1.17** | **1.1** | 1 U | 1 U | 5 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 5 U | 1 U | 1 U | 1 U | **0.47 J** | 1 U | **0.35 J** | 5 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 5 U | 1 U | 1 U | **16.1** | **32** | **13.1** | **22** | 5 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 1 U | 1 U | **5.52** | **3.4** | **6.61** | **3.4** | 5 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 5 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 10 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 10 U | 2 U | 5 U* | 2 U | 5 UJ | 2 U | 5 UJ | 10 U | 5 UJ |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | **2.4** | NA | 1 U | NA | 1 U | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | 1 U | 1 U | **0.651 J** | **3.3** | 1 U | **7.8** | 5 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 10 U | 1 U | 5 U* | 1 U | 5 UJ | 1 U | 5 UJ | 5 U | 5 UJ |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 5 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 10 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | 5 U | NA | 5 U | NA | 5 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 10 U | 1 U | 5 U* | 1 U | 5 UJ | 1 U | 5 UJ | 5 U | 5 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | 5 U | 1 U | 1 U | **52.2** | **51** | **58.6** | **30** | 5 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| | | | Sample Name | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW12 | GPEC-MW12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| | | | Screen Zone | Deep | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow |
| | | | Sample Date | 11/13/2024 | 7/15/2009 | 12/17/2012 | 11/1/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 5 U | 1 U | 1 U | **17.1** | **25** | **17.8** | **16** | 5 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | 5 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U | 1 U |
| Total VOCs | | TVOC | NE | **5.39** | **46.8** | **43.804** | **50.41** | **93.861** | **116.27** | **96.752** | **79.55** | **73.9** | **250.26** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | **10** | **9.5** | **8 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 10 U | **0.73 J** | **0.311 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | **0.46 J** | **0.305 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 10 U | **9.3** | **4.41** | **3.9 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 4.4 U | **21.3** | **22** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 4.4 U | **103** | **110** | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | **6.4** | **3.32** | **3.3 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 4.4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 4.4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 4.4 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 4.4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 4.4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 4.4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 4.4 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | **26.89** | **142.146** | **147.2** | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | 10 U | NA | 10 UJ | NA | 10 UJ | NA | 10 UJ |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | **1.9 J** | NA | 10 U | NA | 10 U | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4.4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 4.4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 10 U | **4.9** | **2.88** | **4.3 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 5.6 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | **9** | **4.66** | **3.8 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | **0.43 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | **1.5 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 4.4 U | **0.478 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 4.4 U | 1 U | **1.5 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 28 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 28 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 4.4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| | | | Sample Name | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW12 | GPEC-MW12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| | | | Screen Zone | Deep | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow |
| | | | Sample Date | 11/13/2024 | 7/15/2009 | 12/17/2012 | 11/1/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 4.4 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4.4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 4.4 U | 1 U | 10 U* | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 4.4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4.4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 11 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4.4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 28 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 11 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 4.4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | **42.72** | **150.164** | **158.7** | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | 8.08 U | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | 50.5 U | NA | NA | NA | NA | 70.9 U | NA | 39.8 U | NA | 108 U |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | 50.5 U | NA | NA | NA | NA | 70.9 U | NA | 39.8 U | NA | 108 U |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | 10.1 U | NA | NA | NA | NA | 14.2 U | NA | 7.97 U | NA | 21.6 U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | 8.08 U | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | 8.08 U | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | 20.2 U | NA | NA | NA | NA | 28.3 U | NA | 15.9 U | NA | 43.2 U |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | **3.98 J** |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | 20.2 U | NA | NA | NA | NA | 28.3 U | NA | 15.9 U | NA | 43.2 U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | 4.04 U | NA | NA | NA | NA | 5.67 U | NA | 3.19 U | NA | 8.64 U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | 4.04 U | NA | NA | NA | NA | 5.67 U | NA | 3.19 U | NA | 8.64 U |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | 8.08 U | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | 4.04 U | NA | NA | NA | NA | 5.67 U | NA | 3.19 U | NA | 8.64 U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | 4.04 U | NA | NA | NA | NA | 5.67 U | NA | 3.19 U | NA | 8.64 U |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | **3.31** | NA | NA | NA | NA | **3.27** | NA | **1.7** | NA | **1.94 J** |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | **12.4** | NA | NA | NA | NA | **10.4 J** | NA | **10.6** | NA | **10.3 J** |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | **2.72** | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | **1.43 J** | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | **8.96** | NA | NA | NA | NA | **13** | NA | **11.7** | NA | **13.2** |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | **8.17** | NA | NA | NA | NA | **12.4** | NA | **9.92** | NA | **8.77** |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | 2.02 U | NA | NA | NA | NA | **1.04 J** | NA | **1.08 J** | NA | 4.32 U |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | **5.66** | NA | NA | NA | NA | **11.6** | NA | **8.3** | NA | **6.8 J** |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | 2.02 U | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | **1.63 J** | NA | NA | NA | NA | 2.83 U | NA | 1.59 U | NA | 4.32 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | **13.8** | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | 8.08 U | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | **5.1 J** | NA | NA | NA | NA | 11.3 U | NA | 6.37 U | NA | 17.3 U |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | **0.7 J** | NA | NA | NA | NA | **8.54** | NA | **7.34** | NA | **2.74 J** |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 | Area 7 |
| **Investigation Phase** | | | | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| **Location Name** | | | | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW-12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| **Sample Name** | | | | GPEC-MW-11D | GPEC-MW-12 | GPEC-MW12 | GPEC-MW12 | GPEC-MW221D | GPEC-MW221D | GPEC-MW221I | GPEC-MW221I | GPEC-MW221S | GPEC-MW221S |
| **Screen Zone** | | | | Deep | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow |
| **Sample Date** | | | | 11/13/2024 | 7/15/2009 | 12/17/2012 | 11/1/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 | 12/13/2012 | 11/12/2024 |
| **Parent Sample Code** | | | | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | **4.44** | NA | NA | NA | NA | **3.05** | NA | **3.9** | NA | **8.74** |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | **8.39** | NA | NA | NA | NA | **17** | NA | **10.2** | NA | **15.3** |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | **16.7** | NA | NA | NA | NA | **83.9** | NA | **82.3** | NA | **31.2** |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U* | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.55 U | 0.05 U | 0.4 U* | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 0.4 U | 0.05 UJ | 4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | 0.05 U | ND | 0.05 UJ | ND | 0.05 UJ | ND | 0.05 UJ | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | 40 U | NA | 40 U | NA | 40 U | NA | **119** |
| Antimony | | 7440-36-0 | 3 | **0.71 J** | NA | NA | **0.69 J** | NA | **0.93 J** | NA | 2 U | NA | **60.4** |
| Arsenic | | 7440-38-2 | 25 | **1.5 J** | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | **46.2** |
| Barium | | 7440-39-3 | 1000 | **133** | NA | NA | **3220** | NA | **56.2** | NA | **65.8** | NA | **32.2** |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | **160000** | NA | NA | **46800** | NA | **106000** | NA | **93000** | NA | **781000** |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | **2.1 J** | NA | NA | **0.8 J** | NA | **1.7 J** | NA | **1.8 J** | NA | 4 U |
| Copper | | 7440-50-8 | 200 | **2.6 J** | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | 120 U | NA | NA | 120 U | NA | 120 U | NA | 120 U | NA | **406** |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | **100000** | NA | NA | **74400** | NA | **36900** | NA | **59400** | NA | **99300** |
| Manganese | | 7439-96-5 | 300 | **1820** | NA | NA | **153** | NA | **3400** | NA | **2720** | NA | **183** |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | **1.6 J** | NA | NA | 4 U | NA | **1.8 J** | NA | **2.9 J** | NA | 4 U |
| Potassium | | 7440-09-7 | NE | **16800** | NA | NA | **33500 B** | NA | **10300** | NA | **9800** | NA | **37400** |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | 2.5 U | NA | 2.5 U | NA | 2.5 U | NA | **25.7** |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | **472000** | NA | NA | **1430000** | NA | **124000** | NA | **148000** | NA | **573000** |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | **7.7 J** | NA | NA | 16 U | NA | 16 U | NA | 16 U | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **116 J** | **195** | NA | **736** | NA | **55.2** | NA | **33.7 J** | NA |
| Antimony | | 7440-36-0 | 3 | NA | 15 U | 4 U | NA | 4 U | NA | 4 U | NA | **75.3** | NA |
| Arsenic | | 7440-38-2 | 25 | NA | 15 U | **3.03** | NA | **1.38 J** | NA | **1.54 J** | NA | **21.7** | NA |
| Barium | | 7440-39-3 | 1000 | NA | **2690** | **2540** | NA | **112** | NA | **76.8** | NA | **31.6 J** | NA |
| Beryllium | | 7440-41-7 | 3* | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | NA | **87900** | **55700** | NA | **101000** | NA | **77700** | NA | **982000** | NA |
| Chromium | | 7440-47-3 | 50 | NA | 5 U | 8 U | NA | 8 U | NA | 8 U | NA | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | **4 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | **1.2 J** | 8 U | NA | **4.2 J** | NA | 8 U | NA | 8 U | NA |
| Copper | | 7440-50-8 | 200 | NA | 10 U | 8 U | NA | **5.35 J** | NA | 8 U | NA | 8 U | NA |
| Iron | | 7439-89-6 | 300 | NA | **7740** | **6730** | NA | **6750** | NA | **1800** | NA | **996** | NA |
| Lead | | 7439-92-1 | 25 | NA | 15 U | **5.18** | NA | **3.38** | NA | **0.776 J** | NA | **2.47** | NA |
| Magnesium | | 7439-95-4 | 35000* | NA | **95400** | **98000** | NA | **42000** | NA | **47800** | NA | **228000** | NA |
| Manganese | | 7439-96-5 | 300 | NA | **408** | **311** | NA | **3830** | NA | **1800** | NA | **7.31** | NA |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | NA | 5 U | 4 U | NA | **4.57** | NA | **2.66 J** | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | NA | **38100** | **44800** | NA | **8320** | NA | **30500** | NA | **126000** | NA |
| Selenium | | 7782-49-2 | 10 | NA | 38 UJ | 8 U | NA | 8 U | NA | 8 U | NA | 8 U | NA |
| Silver | | 7440-22-4 | 50 | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | NA | **949000** | **1070000** | NA | **122000** | NA | **161000** | NA | **2170000** | NA |
| Thallium | | 7440-28-0 | 0.5* | NA | 15 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | NA | **4.7 J** | 8 U | NA | **2.66 J** | NA | 8 U | NA | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | NA | 25 U | **8.41** | NA | **9.53** | NA | **6.82 J** | NA | **8.88** | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 5 U | 10 U | 2 U | NA | 2 U | NA | **6** | NA | **32** | NA |
| Total Cyanide | | 57-12-5 | 200 | **9.7 J** | **89** | **73** | NA | 20 U | NA | **44** | NA | **194** | NA |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Investigation Phase | | | | Supplemental | PDI | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 |
| Location Name | | | | GPEC-MW402 | GPEC-MW-13 | GPEC-MW-13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| Sample Name | | | | GPEC-MW402 | GPEC-MW-13 | GPEC-MW13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| Screen Zone | | | | Deep | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Deep |
| Sample Date | | | | 11/1/2024 | 7/24/2009 | 12/14/2012 | 12/20/2012 | 11/19/2024 | 12/20/2012 | 11/19/2024 | 12/22/2012 | 12/3/2024 | 12/14/2012 |
| Parent Sample Code | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 5 U | 1 U | **0.403 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| m/p-Xylene | | 179601-23-1 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Total Xylene | | 1330-20-7 | 5 | NA | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Total BTEX | | TBTEX | NE | ND | ND | ND | **0.403** | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 U | 5 U | 2 U | 5 U | 2 U | 5 U | 5 U | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | NA | R | 20 U | NA | 20 U | NA | 20 U | NA | R |
| Acrylonitrile | | 107-13-1 | 5 | NA | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA | 20 U |
| Bromochloromethane | | 74-97-5 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| Chloroform | | 67-66-3 | 7 | 1 U | **2.4 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **0.61 J** | 5 U | 1 U | **0.517 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | **18** | 5 U | 1 U | 1 U | **1.4** | 1 U | 1 U | 1 U | 1 U | **6.41** |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 5 U | 1 U | **3.75** | **0.85** | 1 U | 1 U | 1 U | 1 U | **1.21** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 1 U | 5 U | 2 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| 2-Hexanone | | 591-78-6 | 50* | 5 U | 10 U | 2 U | 1 U | 5 U | 1 U | 5 U | 2 U | 5 U | 2 U |
| Isopropylbenzene | | 98-82-8 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 5 U | 10 U | 1 U | **60.5** | 5 U | **1.04** | 5 U | 1 U | 5 U | 1 U |
| Methylene chloride | | 75-09-2 | 5 | 1 U | 5 U | 2 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | 5 U | NA | NA | NA | 5 U | NA | 5 U | NA | 5 U | NA |
| Methylcyclohexane | | 108-87-2 | NE | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 5 U | 10 U | 1 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 1 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | 1 U | **44** | **14.4** | **112** | **9.6** | **1.46** | **0.44** | 1 U | 1 U | **30** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | 1 U | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 |
| | | | Location Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW-13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Sample Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Screen Zone | Deep | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Deep |
| | | | Sample Date | 11/1/2024 | 7/24/2009 | 12/14/2012 | 12/20/2012 | 11/19/2024 | 12/20/2012 | 11/19/2024 | 12/22/2012 | 12/3/2024 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | 1 U | 1 U* | 1 U | 1 U* | 1 U | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | **1.8 J** | **0.454 J** | **7.7** | **1.3** | 1 U | 1 U | 1 U | 1 U | **3.41** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | 1 U | 1 U | 1 U | 1 U | **0.46** | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | NA | 1 U | 1 U | NA | 1 U | **NA** | 1 U | NA | 1 U |
| Vinyl acetate | | 108-05-4 | NE | NA | NA | 1 U | 1 U | NA | 1 U | **NA** | 1 U | NA | 1 U |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **18.61** | **48.2** | **14.854** | **184.87** | **13.15** | **2.5** | **0.9** | ND | ND | **41.03** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **4.97** | 10 U | 1 U | 10 U | 1 U |
| Acenaphthylene | | 208-96-8 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | **2.28** | 10 U | 1 U | 10 U | 1 U |
| Anthracene | | 120-12-7 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **0.557 J** | 10 U | 1 U | 10 U | 1 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Fluoranthene | | 206-44-0 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **2.03** | 10 U | 1 U | 10 U | 1 U |
| Fluorene | | 86-73-7 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **5.68** | 10 U | 1 U | 10 U | 1 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | **3.51** | 10 U | 1 U | 10 U | 1 U |
| Naphthalene | | 91-20-3 | 10* | 2 U | 4.2 U | 1 U | **0.686 J** | 2 U | **10.3** | 2 U | 1 U | 2 U | 1 U |
| Phenanthrene | | 85-01-8 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **15.1** | 10 U | 1 U | 10 U* | 1 U |
| Pyrene | | 129-00-0 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | **2.33** | 10 U | 1 U | 10 U | 1 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 1 U | 4.2 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U* | 0.1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 1 U | 4.2 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U* | 0.1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 2 U | 4.2 U | 0.1 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 1 U | 4.2 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U |
| Chrysene | | 218-01-9 | 0.002* | 2 U | 4.2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U* | 1 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 1 U | 4.2 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 2 U | 4.2 U | 0.1 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | **0.686** | ND | **46.757** | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Benzaldehyde | | 100-52-7 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4.2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 2 U | 4.2 U | 1 U | 1 U | 2 U | 1 U | 2 U | **0.751 J** | 2 U | 1 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Caprolactam | | 105-60-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| Carbazole | | 86-74-8 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U* | 1 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 10 U | 5.3 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Chlorophenol | | 95-57-8 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Dibenzofuran | | 132-64-9 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | **0.812 J** | 10 U | 1 U | 10 U | 1 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 4.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 4.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Diethyl phthalate | | 84-66-2 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 20 U | 26 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 40 U | 26 U | 1 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U | 1 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 2 U | 4.2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 |
| | | | Location Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW-13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Sample Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Screen Zone | Deep | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Deep |
| | | | Sample Date | 11/1/2024 | 7/24/2009 | 12/14/2012 | 12/20/2012 | 11/19/2024 | 12/20/2012 | 11/19/2024 | 12/22/2012 | 12/3/2024 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 1 U | 4.2 U | 0.02 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4.2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Hexachloroethane | | 67-72-1 | 5 | 2 U | 4.2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Isophorone | | 78-59-1 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U* | 1 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U* | 1 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4.2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 4-Nitrophenol | | 100-02-7 | NE | 20 U | 11 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4.2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U* | 1 U |
| Pentachlorophenol | | 87-86-5 | 1 | 20 U | 26 U | 0.1 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U |
| Phenol | | 108-95-2 | 1 | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | 10 U | NA | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 10 U | 11 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 10 U | 4.2 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U |
| Total SVOCs | | TSVOC | NE | ND | ND | ND | **0.686** | ND | **47.569** | ND | **0.751** | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | 45 U* | NA | 411 U* | NA | 125 U | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | 45 U | NA | 411 U | NA | 125 U | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | 8.99 U* | NA | 82.2 U* | NA | 25 U | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | 18 U* | NA | 164 U* | NA | 50 U | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | 18 U | NA | 164 U | NA | 50 U | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | 3.6 U | NA | 32.9 U | NA | 10 U | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | 3.6 U | NA | 32.9 U | NA | 10 U | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | 3.6 U | NA | 32.9 U | NA | 10 U | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | 3.6 U | NA | 32.9 U | NA | 10 U | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | **1.51 J** | NA | 16.4 U | NA | **4 J** | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | **13.5** | NA | 65.8 U | NA | **21.5** | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | **1.41 J** | NA | 16.4 U | NA | **4.73 J** | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | **29.2** | NA | **7.49 J** | NA | **13.5** | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | **17.5** | NA | **7.23 J** | NA | **17.4** | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | **0.51 J** | NA | 16.4 U | NA | 5 U | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | **13.1** | NA | 32.9 U | NA | **12.8** | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | 1.8 U | NA | 16.4 U | NA | 5 U | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | **0.52 J** | NA | 16.4 U | NA | 5 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | 7.19 U | NA | 65.8 U | NA | 20 U | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | **2.6** | NA | 16.4 U | NA | 5 U | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 7 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Supplemental | PDI | Phase 1 | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 |
| | | | Location Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW-13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Sample Name | GPEC-MW402 | GPEC-MW-13 | GPEC-MW13 | GPEC-MW217D | GPEC-MW217D | GPEC-MW217I | GPEC-MW217I | GPEC-MW217S | GPEC-MW217S | GPEC-MW218D |
| | | | Screen Zone | Deep | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Shallow | Shallow | Deep |
| | | | Sample Date | 11/1/2024 | 7/24/2009 | 12/14/2012 | 12/20/2012 | 11/19/2024 | 12/20/2012 | 11/19/2024 | 12/22/2012 | 12/3/2024 | 12/14/2012 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | **38.1** | NA | **7.76 J** | NA | **15.6** | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | **3.81** | NA | **10.8 J** | NA | **20** | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | **64** | NA | **63.8** | NA | **44.5** | NA |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.4 U | 0.53 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.4 U | NA | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.4 U | NA | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | ND | 0.05 U | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND | 0.05 U |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | NA | NA | NA | 40 U | NA | 40 U | NA | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 2 U | NA | NA | NA | **0.67** | NA | **1** | NA | **4.3** | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | NA | NA | 2 U | NA | **1.7** | NA | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **35** | NA | NA | NA | **337** | NA | **168** | NA | **64.8** | NA |
| Beryllium | | 7440-41-7 | 3* | 0.8 U | NA | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **186000** | NA | NA | NA | **231000** | NA | **102000** | NA | **37100** | NA |
| Chromium | | 7440-47-3 | 50 | 4 U | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA |
| Cobalt | | 7440-48-4 | NE | **2.3 J** | NA | NA | NA | **1** | NA | 4 U | NA | 4 U | NA |
| Copper | | 7440-50-8 | 200 | 4 U | NA | NA | NA | **2** | NA | **7.2** | NA | **2 J** | NA |
| Iron | | 7439-89-6 | 300 | 120 U | NA | NA | NA | 120 U | NA | 120 U | NA | 120 U | NA |
| Lead | | 7439-92-1 | 25 | 1.2 U | NA | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **114000** | NA | NA | NA | **65800** | NA | **24800** | NA | **4500** | NA |
| Manganese | | 7439-96-5 | 300 | **2630** | NA | NA | NA | **213** | NA | **85** | NA | 8 U | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | NA | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA |
| Nickel | | 7440-02-0 | 100 | **4.9** | NA | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA |
| Potassium | | 7440-09-7 | NE | **15200** | NA | NA | NA | **5070** | NA | **2380** | NA | **2670** | NA |
| Selenium | | 7782-49-2 | 10 | 2.5 U | NA | NA | NA | **3.4** | NA | **1.4** | NA | **0.63 J** | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **204000** | NA | NA | NA | **160000** | NA | **35400** | NA | **3880** | NA |
| Thallium | | 7440-28-0 | 0.5* | 0.8 U | NA | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA |
| Vanadium | | 7440-62-2 | NE | 4 U | NA | NA | NA | 4 U | NA | **2.2** | NA | 4 U | NA |
| Zinc | | 7440-66-6 | 2000* | **41.1** | NA | NA | NA | **36.6** | NA | 16 U | NA | **23.1** | NA |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | **178 J** | **40.3** | **230** | NA | **61.9** | NA | **952** | NA | **27.6 J** |
| Antimony | | 7440-36-0 | 3 | NA | 15 U | 4 U | 4 U | NA | 4 U | NA | **9.32** | NA | 4 U |
| Arsenic | | 7440-38-2 | 25 | NA | 15 U | 2 U | 2 U | NA | **1.01 J** | NA | **1.49 J** | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | **38.3** | **46.4** | **54.8** | NA | **120** | NA | **102** | NA | **48** |
| Beryllium | | 7440-41-7 | 3* | NA | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Cadmium | | 7440-43-9 | 5 | NA | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **84100** | **67800** | **236000** | NA | **94000** | NA | **221000** | NA | **103000** |
| Chromium | | 7440-47-3 | 50 | NA | **0.72 J** | 8 U | 8 U | NA | 8 U | NA | **2.21 J** | NA | 8 U |
| Chromium (VI) | | 18540-29-9 | NE | NA | **2.8 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | NA | **0.64 J** | 8 U | **8.64** | NA | 8 U | NA | 8 U | NA | **3.56 J** |
| Copper | | 7440-50-8 | 200 | NA | 10 U | 8 U | 8 U | NA | 8 U | NA | **19.3** | NA | 8 U |
| Iron | | 7439-89-6 | 300 | NA | **243** | **101** | **1590** | NA | **519** | NA | **1500** | NA | **2940** |
| Lead | | 7439-92-1 | 25 | NA | 15 U | **1.25 J** | **0.874 J** | NA | **1.77 J** | NA | **38** | NA | 2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **25800** | **18700** | **67200** | NA | **28200** | NA | **16600** | NA | **49200** |
| Manganese | | 7439-96-5 | 300 | NA | **335** | **25.2** | **4190** | NA | **914** | NA | **189** | NA | **5050** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | 0.5 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA | 0.5 U |
| Nickel | | 7440-02-0 | 100 | NA | **2.8 J** | 4 U | **8.69** | NA | **2.03 J** | NA | **4.82** | NA | **3.01 J** |
| Potassium | | 7440-09-7 | NE | NA | **4770** | **2070** | **5850** | NA | **3080** | NA | **8920** | NA | **4140** |
| Selenium | | 7782-49-2 | 10 | NA | 38 U | 8 U | **5.69 J** | NA | 8 U | NA | 8 U | NA | 8 U |
| Silver | | 7440-22-4 | 50 | NA | 5 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **41200** | **20400** | **71800** | NA | **64700** | NA | **15600** | NA | **74200** |
| Thallium | | 7440-28-0 | 0.5* | NA | 15 U | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U |
| Vanadium | | 7440-62-2 | NE | NA | 5 U | 8 U | 8 U | NA | 8 U | NA | **3.91 J** | NA | 8 U |
| Zinc | | 7440-66-6 | 2000* | NA | 25 U | 8 U | **13.8** | NA | 8 U | NA | **41.3** | NA | **5.37 J** |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | NA | 10 U | **8** | 2 U | 5 U | 2 U | 5 U | 2 U | NA | **3** |
| Total Cyanide | | 57-12-5 | 200 | NA | **68.4** | **21** | **50** | **53.9** | **26** | **9.2 J** | **24** | NA | **16 J** |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| Location Name | | | | GPEC-MW218I | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW-9 | GPEC-MW-9 | GPE-MW-1D | GPE-MW-1D | GPE-MW-1D |
| Sample Name | | | | GPEC-MW218I | GPEC-MW-8 | GPEC-MW08 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW09 | GPEC-MW-9 | GPE-MW-1D | GPE-MW1D | GPE-MW-1D |
| Screen Zone | | | | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| Sample Date | | | | 12/14/2012 | 7/22/2009 | 12/13/2012 | 11/22/2024 | 7/24/2009 | 12/18/2012 | 11/12/2024 | 7/21/2009 | 12/13/2012 | 11/19/2024 |
| Parent Sample Code | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | 2 U | 5 U | 2 U | NA | 5 U | 2 U | NA | 10 U | 2 U | NA |
| Total BTEX | | TBTEX | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 10 UJ | 5 U | 5 U | 10 U | 5 U | 5 UJ | **8.3 J** | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | R | NA | R | NA | NA | 20 U | NA | NA | R | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | NA | 20 U | NA | NA | 20 U | NA | NA | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 5 UJ | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | **0.68 J** | 10 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 5 UJ | 1 U | 1 U | 5 U | 1 U | 1 UJ | 10 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | **15** | 1 U | 1 U | 5 U | 1 U | **0.96 J** | 10 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 UJ | NA | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | **1.4 J** | 1 U | **0.26 J** | 5 U | 1 U | 1 U | **3.6 J** | 1 U | **0.27 J** |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | **4.29** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **0.802 J** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **8.3 J** | **13.6** | **0.48 J** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | **1.81** | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 10 U | 2 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 2 U | 10 U | 2 U | 5 U | 10 U | 2 U | 5 UJ | 20 U | 2 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 10 U | 1 U | 5 U | 10 U | **1.89** | 5 UJ | 20 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 5 U | 2 U | 1 U | 5 U | 2 U | 1 U | 10 UJ | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | NA | 5 U | NA | NA | 5 U | NA | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 10 U | 1 U | 5 U | 10 U | 1 U | 5 UJ | 20 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **19.5** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **170** | **22.2** | **0.71 J** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW218I | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW-9 | GPEC-MW-9 | GPE-MW-1D | GPE-MW-1D | GPE-MW-1D |
| | | | Sample Name | GPEC-MW218I | GPEC-MW-8 | GPEC-MW08 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW09 | GPEC-MW-9 | GPE-MW-1D | GPE-MW1D | GPE-MW-1D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/14/2012 | 7/22/2009 | 12/13/2012 | 11/22/2024 | 7/24/2009 | 12/18/2012 | 11/12/2024 | 7/21/2009 | 12/13/2012 | 11/19/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | **0.6 J** |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **2.92** | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **13** | **15** | **0.41 J** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U | NA | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | NA | 1 U | NA | NA | 1 U | NA | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 5 U | 1 U | 1 U | 5 U | 1 U | 1 U | **5.7 J** | **11.4** | **0.58 J** |
| Total VOCs | | TVOC | NE | **27.512** | **16.4** | ND | **0.26** | ND | **1.89** | **1.64** | **208.9** | **64.01** | **3.05** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 1 U | 4 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 4 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 4 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 4 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U | 4.2 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 4 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 4 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 4 U | 0.1 U | 1 U | 4.4 U | 0.1 U | 1 U | 4.2 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 4 U | 0.1 U | 2 U | 4.4 U | 0.1 U | 2 U | 4.2 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | NA | 10 U | NA | NA | 10 UJ | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 4 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 4 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 4 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 5 U | 1 U | 10 U | 5.5 U | 1 U | 10 U | 5.3 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 4 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 4 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 4 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 25 U | 1 U | 20 U | 27 U | 1 U | 20 U | 26 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 25 U | 1 U | 40 U | 27 U | 1 U | 40 U | 26 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 4 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| Location Name | | | | GPEC-MW218I | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW-9 | GPEC-MW-9 | GPE-MW-1D | GPE-MW-1D | GPE-MW-1D |
| Sample Name | | | | GPEC-MW218I | GPEC-MW-8 | GPEC-MW08 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW09 | GPEC-MW-9 | GPE-MW-1D | GPE-MW1D | GPE-MW-1D |
| Screen Zone | | | | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| Sample Date | | | | 12/14/2012 | 7/22/2009 | 12/13/2012 | 11/22/2024 | 7/24/2009 | 12/18/2012 | 11/12/2024 | 7/21/2009 | 12/13/2012 | 11/19/2024 |
| Parent Sample Code | | | | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 4 U | 0.02 U | 1 U | 4.4 U | 0.02 U | 1 U | 4.2 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 4 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 4 U | 1 U | 2 U | 4.4 U | 1 U | 2 U | 4.2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 4 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 10 U | 1 U | 20 U | 11 U | 1 U | 20 U | 11 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 4 U | 1 U | 1 U | 4.4 U | 1 U | 1 U | 4.2 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 25 U | 0.1 U | 20 U | 27 U | 0.1 U | 20 U | 26 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 4 U | NA | NA | 4.4 U | NA | NA | 4.2 U | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 10 U | 1 U | 10 U | 11 U | 1 U | 10 U | 11 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 4 U | 1 U | 10 U | 4.4 U | 1 U | 10 U | 4.2 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 44 U* |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 44 U |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 8.8 U* |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 17.6 U* |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 17.6 U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.52 U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.52 U |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.52 U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.52 U |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **2.2** |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **7.09** |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **0.94 J** |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **3.2** |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **3.99** |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **4.04** |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1.76 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 7.04 U |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **0.68 J** |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental |
| | | | Location Name | GPEC-MW218I | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW-9 | GPEC-MW-9 | GPE-MW-1D | GPE-MW-1D | GPE-MW-1D |
| | | | Sample Name | GPEC-MW218I | GPEC-MW-8 | GPEC-MW08 | GPEC-MW-8 | GPEC-MW-9 | GPEC-MW09 | GPEC-MW-9 | GPE-MW-1D | GPE-MW1D | GPE-MW-1D |
| | | | Screen Zone | Intermediate | Intermediate | Intermediate | Intermediate | Shallow | Shallow | Shallow | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/14/2012 | 7/22/2009 | 12/13/2012 | 11/22/2024 | 7/24/2009 | 12/18/2012 | 11/12/2024 | 7/21/2009 | 12/13/2012 | 11/19/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | **3.52** |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | **5.69** |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | **21.4** |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.5 UJ | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.5 UJ | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.5 UJ | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.5 UJ | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.5 UJ | 0.05 U | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 UJ | 0.5 UJ | 0.05 UJ | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 UJ | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 UJ | 0.5 UJ | 0.05 UJ | 0.4 U | 0.54 U | 0.05 U | 0.4 U | 0.5 U | 0.05 UJ | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 UJ | NA | 0.05 UJ | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 UJ | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 UJ | NA | 0.05 UJ | 0.4 U | NA | 0.05 U | 0.4 U | NA | 0.05 UJ | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 UJ | ND | 0.05 UJ | ND | ND | 0.05 U | ND | ND | 0.05 UJ | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | NA | 40 U | NA | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | NA | NA | **24.1** | NA | NA | **17.3** | NA | NA | **103** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | NA | NA | **72700** | NA | NA | **35100** | NA | NA | **144000** |
| Chromium | | 7440-47-3 | 50 | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | NA | NA | **0.74 J** | NA | NA | 4 U | NA | NA | **2** |
| Copper | | 7440-50-8 | 200 | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | NA | NA | 120 U | NA | NA | 120 U | NA | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | NA | NA | 1.2 U | NA | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | NA | **19100** | NA | NA | **9420** | NA | NA | **24700** |
| Manganese | | 7439-96-5 | 300 | NA | NA | NA | **4980** | NA | NA | **116** | NA | NA | **2130** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | NA | 0.2 U | NA | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | NA | NA | **6340** | NA | NA | **1300** | NA | NA | **5620** |
| Selenium | | 7782-49-2 | 10 | NA | NA | NA | 2.5 U | NA | NA | **2.9 J** | NA | NA | 2.5 U |
| Silver | | 7440-22-4 | 50 | NA | NA | NA | 2 U | NA | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | NA | **109000** | NA | NA | **22600** | NA | NA | **104000** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | NA | 4 U | NA | NA | 4 U | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | NA | NA | **14.3 J** | NA | NA | 16 U | NA | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | **506** | 40 U | NA | **362** | **234** | NA | **904** | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 4 U | 15 U | **2.62 J** | NA | 15 U | 4 U | NA | 15 UJ | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | **4.7 J** | **2.92** | NA | 15 U | 2 U | NA | 15 U | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **55.4** | **9.4** | **45.3** | NA | **29.3** | **22.1 J** | NA | **70.8** | **45.3** | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | 5 U | **2.52** | NA | 5 U | 2 U | NA | 5 UJ | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | 5 U | **2.75** | NA | 5 U | 2 U | NA | 5 UJ | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **137000** | **28200** | **88800** | NA | **48600** | **42200** | NA | **191000** | **101000** | NA |
| Chromium | | 7440-47-3 | 50 | 8 U | **1.1 J** | **2.58 J** | NA | **3 J** | **3.15 J** | NA | **2.5 J** | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | 10 U | NA | NA | 10 U | NA | NA | 10 U | NA | NA |
| Cobalt | | 7440-48-4 | NE | **2.62 J** | 5 U | **3.45 J** | NA | 5 U | 8 U | NA | **2.8 J** | 8 U | NA |
| Copper | | 7440-50-8 | 200 | 8 U | 10 U | 8 U | NA | **1.9 J** | 8 U | NA | 10 U | 8 U | NA |
| Iron | | 7439-89-6 | 300 | **1460** | **652** | **416** | NA | **716** | **422** | NA | **1530** | **79 J** | NA |
| Lead | | 7439-92-1 | 25 | 2 U | 15 U | **2.86** | NA | 15 U | **8.72** | NA | 15 UJ | 2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **38500** | **9030** | **30000** | NA | **9360** | **8460** | NA | **76400** | **30200** | NA |
| Manganese | | 7439-96-5 | 300 | **1010** | **1180** | **5230** | NA | **67.3** | **40.1** | NA | **1150** | **646** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | 0.2 U | 0.5 U | NA | 0.2 U | 0.5 U | NA | 0.2 U | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **7.43** | **1.8 J** | **3.49 J** | NA | **2.8 J** | **1.41 J** | NA | **4.3 J** | **2.16 J** | NA |
| Potassium | | 7440-09-7 | NE | **3170** | **4160** | **6840** | NA | **2750** | **1230** | NA | **5620** | **3410** | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | 38 U | 8 U | NA | 38 U | **7.77 J** | NA | 38 UJ | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | 5 U | **2.27** | NA | 5 U | 2 U | NA | 5 UJ | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **78000** | **115000** | **76800** | NA | **26700** | **14600** | NA | **107000** | **46400** | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | 15 U | **2.29** | NA | 15 U | 2 U | NA | 15 UJ | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | 8 U | **2.4 J** | **2.75 J** | NA | **1.4 J** | 8 U | NA | **5.6 J** | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | **5.34 J** | **9.6 J** | **6.64 J** | NA | **9.8 J** | **16.8** | NA | **14.4 J** | **4.49 J** | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | **4** | 10 U | 2 U | NA | 10 U | 2 U | NA | 10 U | **4** | 5 U |
| Total Cyanide | | 57-12-5 | 200 | **25** | 10 U | 20 U | NA | **24.1** | 20 U | NA | 10 U | **26** | **35.7** |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| Investigation Phase | | | | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| Location Name | | | | GPE-MW-1S | GPE-MW-1S | GPE-MW-1S | MW-3 | MW-3 | MW-3 | MW-4 | MW-4 | MW-5 | MW-5 |
| Sample Name | | | | GPE-MW-1S | GPE-MW1S | GPE-MW-1S | MW-3 | MW-03 | MW-3 | MW-04 | MW-4 | MW-05 | MW-5 |
| Screen Zone | | | | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| Sample Date | | | | 7/21/2009 | 12/13/2012 | 11/22/2024 | 7/23/2009 | 12/17/2012 | 10/31/2024 | 12/18/2012 | 11/1/2024 | 12/18/2012 | 10/31/2024 |
| Parent Sample Code | | | | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | NA | 1 U | NA | NA | 1 U* | NA | 1 U | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | 5 U | 2 U | NA | 10 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Total BTEX | | TBTEX | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 10 UJ | 5 U | 5 U | 20 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | NA | R | NA | NA | 20 U | NA | 20 U | NA | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | NA | 20 U | NA | NA | 20 U | NA | 20 U | NA | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 5 UJ | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 5 UJ | **0.504 J** | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | 5 U | 1 U | 1 U | **3.4 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloromethane | | 74-87-3 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | NA | 1 U* | NA | 1 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | **3.6 J** | **1.43** | **0.88 J** | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **1.1 J** | **0.611 J** | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 5 U | 2 U | 1 U | 10 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 10 U | 2 U | 5 U | 20 U | 2 U | 5 U | 2 U | 5 U | 2 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 10 U | 1 U | 5 U | 20 U | 1 U | 5 U* | 1 U | 5 U | **4.89** | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 5 U | 2 U | 1 U | 10 UJ | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | 5 U | NA | NA | 5 U | NA | 5 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 10 U | 1 U | 5 U | 20 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **24** | **1.98** | **0.48 J** | **150** | **131** | **11 *** | **67.3** | **3.3** | 1 U | 1 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U | NA | NA | 1 U | NA | 1 U | NA | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-1S | GPE-MW-1S | GPE-MW-1S | MW-3 | MW-3 | MW-3 | MW-4 | MW-4 | MW-5 | MW-5 |
| | | | Sample Name | GPE-MW-1S | GPE-MW1S | GPE-MW-1S | MW-3 | MW-03 | MW-3 | MW-04 | MW-4 | MW-05 | MW-5 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 7/21/2009 | 12/13/2012 | 11/22/2024 | 7/23/2009 | 12/17/2012 | 10/31/2024 | 12/18/2012 | 11/1/2024 | 12/18/2012 | 10/31/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | 1 U | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 5 U | **1.23** | **3.6** | 10 U | 1 U | 1 U | **1.08** | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 5 U | 1 U | 1 U | 10 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **2.8 J** | **0.767 J** | 1 U | **2.9 J** | **1.11** | **0.85 J** | **0.925 J** | 1 U | 1 U | 1 U |
| Trichlorofluoromethane | | 75-69-4 | 5 | NA | 1 U | **0.35 J** | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | NA | 1 U | **NA** | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | NA | 1 U | **NA** | NA | 1 U | NA | 1 U | NA | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | **1.3 J** | **0.695 J** | 1 U | 10 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **32.8** | **7.217** | **5.31** | **156.3** | **132.11** | **11.85** | **69.305** | **3.3** | **4.89** | ND |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 4.3 U | 1 U | 2 U | 4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 4.3 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 4.3 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 4.3 U | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 4.3 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 4.3 U | 1 U | 2 U | 4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 4.3 U | 0.1 U | 1 U | 4 U | 0.1 U | 1 U | 0.1 U | 1 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 4.3 U | 0.1 U | 2 U | 4 U | 0.1 U | 2 U | 0.1 U | 2 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | 4.3 U | NA | NA | 4 U | NA | NA | NA | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 4.3 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 4.3 U | 1 U | 2 U | 4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 5.4 U | 1 U | 10 U | 5 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | 4.3 U | NA | NA | 4 U | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | 4.3 U | NA | NA | 4 U | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | 4.3 U | NA | NA | 4 U | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 27 U | 1 U | 20 U | 25 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 27 U | 1 U | 40 U | 25 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 4.3 U | 1 U | 2 U | 4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-1S | GPE-MW-1S | GPE-MW-1S | MW-3 | MW-3 | MW-3 | MW-4 | MW-4 | MW-5 | MW-5 |
| | | | Sample Name | GPE-MW-1S | GPE-MW1S | GPE-MW-1S | MW-3 | MW-03 | MW-3 | MW-04 | MW-4 | MW-05 | MW-5 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 7/21/2009 | 12/13/2012 | 11/22/2024 | 7/23/2009 | 12/17/2012 | 10/31/2024 | 12/18/2012 | 11/1/2024 | 12/18/2012 | 10/31/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 4.3 U | 0.02 U | 1 U | 4 U | 0.02 U | 1 U | 0.02 U | 1 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 4.3 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 4.3 U | 1 U | 2 U | 4 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 4.3 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 11 U | 1 U | 20 U | 10 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 4.3 U | 1 U | 1 U | 4 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 27 U | 0.1 U | 20 U | 25 U | 0.1 U | 20 U | 0.1 U | 20 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 4.3 U | NA | NA | 4 U | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 11 U | 1 U | 10 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 4.3 U | 1 U | 10 U | 4 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | 208 U | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | 208 U | NA | NA | NA | NA | NA | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | 41.7 U* | NA | NA | NA | NA | NA | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | 8.33 U* | NA | NA | NA | NA | NA | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | 83.3 U* | NA | NA | NA | NA | NA | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | 8.33 U* | NA | NA | NA | NA | NA | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | 83.3 U | NA | NA | NA | NA | NA | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | 16.7 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | 16.7 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | 16.7 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | 16.7 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | **2.43 J** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | **2.75 J** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | **2.62 J** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | **4.61 J** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | 33.3 U | NA | NA | NA | NA | NA | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | 8.33 U | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 |
| | | | Investigation Phase | PDI | Phase 1 | Supplemental | PDI | Phase 1 | Supplemental | Phase 1 | Supplemental | Phase 1 | Supplemental |
| | | | Location Name | GPE-MW-1S | GPE-MW-1S | GPE-MW-1S | MW-3 | MW-3 | MW-3 | MW-4 | MW-4 | MW-5 | MW-5 |
| | | | Sample Name | GPE-MW-1S | GPE-MW1S | GPE-MW-1S | MW-3 | MW-03 | MW-3 | MW-04 | MW-4 | MW-05 | MW-5 |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow | Shallow |
| | | | Sample Date | 7/21/2009 | 12/13/2012 | 11/22/2024 | 7/23/2009 | 12/17/2012 | 10/31/2024 | 12/18/2012 | 11/1/2024 | 12/18/2012 | 10/31/2024 |
| | | | Parent Sample Code | | | | | | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | **6.9 J** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | **13.9** | NA | NA | NA | NA | NA | NA | NA |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | **45.3** | NA | NA | NA | NA | NA | NA | NA |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.54 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.54 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.54 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.54 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.54 U | 0.05 U | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.54 U | 0.05 UJ | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.54 U | 0.05 UJ | 0.4 U | 0.55 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | NA | 0.05 UJ | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | NA | 0.05 UJ | 0.4 U | NA | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | ND | 0.05 UJ | ND | ND | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | 40 U | NA | NA | 40 U | NA | 40 U | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | NA | **62.6** | NA | NA | **81.6** | NA | **58.2** | NA | **88.8** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | NA | **102000** | NA | NA | **147000** | NA | **54400** | NA | **83900** |
| Chromium | | 7440-47-3 | 50 | NA | NA | 4 U | NA | NA | **1.7 J** | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | NA | **0.42 J** | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Copper | | 7440-50-8 | 200 | NA | NA | **2.5 J** | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | NA | 120 U | NA | NA | **70.7 J** | NA | **100 J** | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | NA | 1.2 U | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **20000** | NA | NA | **39500** | NA | **17700** | NA | **23300** |
| Manganese | | 7439-96-5 | 300 | NA | NA | **130** | NA | NA | **2 J** | NA | **118** | NA | **2 J** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Potassium | | 7440-09-7 | NE | NA | NA | **3420** | NA | NA | **3520** | NA | **2390** | NA | **7050** |
| Selenium | | 7782-49-2 | 10 | NA | NA | **3.2** | NA | NA | **6.7** | NA | **6.1** | NA | **1 J** |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **194000** | NA | NA | **110000** | NA | **147000** | NA | **15700** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | NA | **8.2 J** | NA | NA | 16 U | NA | 16 U | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 250 U | **75.7** | NA | 250 U | 40 U | NA | **35.5 J** | NA | **439** | NA |
| Antimony | | 7440-36-0 | 3 | 15 U | 4 U | NA | 15 U | 4 U | NA | 4 U | NA | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | 15 U | 2 U | NA | 15 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **101** | **77.3** | NA | **45.2** | **50.2** | NA | **62.6** | NA | **101** | NA |
| Beryllium | | 7440-41-7 | 3* | 5 U | 2 U | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 5 U | 2 U | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **136000** | **75200** | NA | **84200** | **107000** | NA | **70500** | NA | **106000** | NA |
| Chromium | | 7440-47-3 | 50 | 5 U | 8 U | NA | **4.5 J** | **4.21 J** | NA | 8 U | NA | **3.01 J** | NA |
| Chromium (VI) | | 18540-29-9 | NE | 10 U | NA | NA | **4 J** | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | **0.51 J** | 8 U | NA | 5 U | 8 U | NA | 8 U | NA | 8 U | NA |
| Copper | | 7440-50-8 | 200 | 10 U | 8 U | NA | 10 U | 8 U | NA | 8 U | NA | 8 U | NA |
| Iron | | 7439-89-6 | 300 | **57.2 J** | **159** | NA | **62.9 J** | **72 J** | NA | **96 J** | NA | **1810** | NA |
| Lead | | 7439-92-1 | 25 | 15 U | 2 U | NA | **3 J** | **0.973 J** | NA | **1.72 J** | NA | **14.3** | NA |
| Magnesium | | 7439-95-4 | 35000* | **48100** | **16700** | NA | **28900** | **38100** | NA | **18300** | NA | **25000** | NA |
| Manganese | | 7439-96-5 | 300 | **386** | **813** | NA | **165** | **43.9** | NA | **83.9** | NA | **78.4** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.2 U | 0.5 U | NA | 0.2 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **1.9 J** | **1.49 J** | NA | 5 U | 4 U | NA | **1.41 J** | NA | **1.73 J** | NA |
| Potassium | | 7440-09-7 | NE | **3780** | **3260** | NA | **2260** | **1770** | NA | **1810** | NA | **9360** | NA |
| Selenium | | 7782-49-2 | 10 | 38 U | 8 U | NA | 38 U | **4.55 J** | NA | 8 U | NA | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 5 U | 2 U | NA | 5 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **115000** | **131000** | NA | **31100** | **38200** | NA | **40300** | NA | **10400** | NA |
| Thallium | | 7440-28-0 | 0.5* | 15 U | 2 U | NA | 15 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | **3.6 J** | 8 U | NA | 5 U | 8 U | NA | 8 U | NA | **2.18 J** | NA |
| Zinc | | 7440-66-6 | 2000* | **11.5 J** | **19.4** | NA | 25 U | **4.85 J** | NA | 8 U | NA | **6.73 J** | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 10 U | 2 U | 5 U | 10 U | 2 U | NA | 2 U | **3.1 J** | 2 U | 5 U |
| Total Cyanide | | 57-12-5 | 200 | 10 U | 20 U | **15.7** | **112** | **96** | NA | **83** | **123** | 20 U | **4.5 J** |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Area | | | | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| Investigation Phase | | | | Phase 1 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 1 | Supplemental | Phase 1 | Phase 1 | Supplemental |
| Location Name | | | | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-MW220I | GPEC-MW220I |
| Sample Name | | | | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-XX-121812 | GPEC-MW220I |
| Screen Zone | | | | Shallow | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Intermediate |
| Sample Date | | | | 12/17/2012 | 7/19/2019 | 11/21/2024 | 7/19/2019 | 11/21/2024 | 12/18/2012 | 11/13/2024 | 12/18/2012 | 12/18/2012 | 11/13/2024 |
| Parent Sample Code | | | | | | | | | | | | GPEC-MW-220I | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | 0.5 U | 1 U | 0.5 U | 1 U | NA | 1 U | NA | NA | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | NA | 1 U | NA | NA | 1 U |
| Total Xylene | | 1330-20-7 | 5 | 2 U | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Total BTEX | | TBTEX | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 2 U | 5 U | 2 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | 10 U | NA | 10 U | NA | 20 U | NA | 20 U | 20 U | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | 10 U | NA | 10 U | NA | 20 U | NA | 20 U | 20 U | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U* | 1 U | 1 U | 1 U* |
| Bromoform | | 75-25-2 | 50* | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U* | 1 U | 1 U | 1 U* |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | 2 U | NA | 2 U | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U* | 1 U | 1 U | 1 U* |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | 2 U | NA | 2 U | NA | 1 U | NA | 1 U | 1 U | NA |
| Chloroform | | 67-66-3 | 7 | **1.2** | 0.5 U | 1 U | 0.5 U | 1 U | **2.42** | 1 U | **2.69** | **2.45** | 1 U |
| Chloromethane | | 74-87-3 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U* | 1 U | 1 U | 1 U* |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | **1.76** | **0.58 J** | 1 U | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | **0.901 J** | 0.5 U | 1 U | 0.5 U | 1 U | **1.69** | **1.6** | **3.08** | **2.9** | **2.1** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | **0.466 J** | 1 U | 1 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | NA | NA | NA | 1 U | NA | 1 U | 1 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 0.5 U | 1 U | 0.5 U | 1 U | 2 U | 1 U | 2 U | 2 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | 0.5 U | NA | 0.5 U | NA | 1 U | NA | 1 U | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 2 U | 1 U | 5 U | 1 U | 5 U | 2 U | 5 U | 2 U | 2 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 1 U | 5 U | 1 U | 5 U | 1 U | 5 U | 1 U | 1 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 2 U | 1 U | 2 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | NA | 5 U | NA | 5 U | NA | 5 U | NA | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 2 U | 5 U | 2 U | 5 U | 1 U | 5 U | 1 U | 1 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **58.4** | **34.1** | **11** | 0.5 U | 1 U | **4.01** | **6.1** | **4.72** | **4.17** | **7.7** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | NA | 1 U | NA | 1 U | NA | 1 U | NA | NA | 1 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 1 | Supplemental | Phase 1 | Phase 1 | Supplemental |
| | | | Location Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-MW220I | GPEC-MW220I |
| | | | Sample Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-XX-121812 | GPEC-MW220I |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/17/2012 | 7/19/2019 | 11/21/2024 | 7/19/2019 | 11/21/2024 | 12/18/2012 | 11/13/2024 | 12/18/2012 | 12/18/2012 | 11/13/2024 |
| | | | Parent Sample Code | | | | | | | | | GPEC-MW-220I | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | **3.86** | **1.33** | **0.44** | 0.5 U | 1 U | **1.38** | **1.8** | **0.822 J** | **0.8 J** | **2.2** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 0.5 U | 1 U | 0.5 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | 1 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Total VOCs | | TVOC | NE | **64.361** | **35.43** | **11.44** | ND | ND | **11.726** | **10.08** | **11.312** | **10.32** | **12** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.1 U | 0.1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.1 U | 0.1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 0.1 U | 0.1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.1 U | 0.1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.1 U | 0.1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 0.1 U | 0.1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Benzidine | | 92-87-5 | 5 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NE | NA | 10 U | NA | 10 U | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | **0.3 J** | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U | 1 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 1 | Supplemental | Phase 1 | Phase 1 | Supplemental |
| | | | Location Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-MW220I | GPEC-MW220I |
| | | | Sample Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-XX-121812 | GPEC-MW220I |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/17/2012 | 7/19/2019 | 11/21/2024 | 7/19/2019 | 11/21/2024 | 12/18/2012 | 11/13/2024 | 12/18/2012 | 12/18/2012 | 11/13/2024 |
| | | | Parent Sample Code | | | | | | | | | GPEC-MW-220I | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.02 U | 0.02 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U | 1 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 1 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U | 0.1 U | 0.1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | NA | 10 U | NA | 10 U | NA | 10 U | NA | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U | 1 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | **0.3** | ND | ND | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | NA | 139 U | NA | NA | NA | 59.2 U | NA | NA | 58.5 U |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | NA | 139 U | NA | NA | NA | 59.2 U | NA | NA | 58.5 U |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | NA | 27.8 U* | NA | NA | NA | 11.8 U | NA | NA | 11.7 U |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | NA | 5.56 U* | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | NA | 55.6 U* | NA | NA | NA | 23.7 U | NA | NA | 23.4 U |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | NA | 5.56 U* | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | NA | 55.6 U | NA | NA | NA | 23.7 U | NA | NA | 23.4 U |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | NA | 11.1 U | NA | NA | NA | 4.74 U | NA | NA | 4.68 U |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | NA | 11.1 U | NA | NA | NA | 4.74 U | NA | NA | 4.68 U |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | NA | 11.1 U | NA | NA | NA | 4.74 U | NA | NA | 4.68 U |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | NA | 11.1 U | NA | NA | NA | 4.74 U | NA | NA | 4.68 U |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | NA | **3.68 J** | NA | NA | NA | **4.5** | NA | NA | **4.81** |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | NA | **54.1** | NA | NA | NA | **14.8** | NA | NA | **22.3** |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | NA | **2.88 J** | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | NA | 5.56 U | NA | NA | NA | **0.93 J** | NA | NA | 2.34 U |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | NA | **382** | NA | NA | NA | **13.1** | NA | NA | **10.3** |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | NA | **130** | NA | NA | NA | **33.7** | NA | NA | **47.4** |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | NA | 5.56 U | NA | NA | NA | **0.89 J** | NA | NA | 2.34 U |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | NA | **76.4** | NA | NA | NA | **36.7** | NA | NA | **50.9** |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | NA | 5.56 U | NA | NA | NA | 2.37 U | NA | NA | 2.34 U |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | NA | 22.2 U | NA | NA | NA | 9.48 U | NA | NA | 9.35 U |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | NA | **9.74** | NA | NA | NA | **14.5** | NA | NA | **8.81** |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 8 | Area 8 | Area 8 | Area 8 | Area 8 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 1 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 1 | Supplemental | Phase 1 | Phase 1 | Supplemental |
| | | | Location Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-MW220I | GPEC-MW220I |
| | | | Sample Name | PZ-1 | GPEC-MW537 | GPEC-MW537 | GPEC-MW538 | GPEC-MW538 | GPEC-MW220D | GPEC-MW220D | GPEC-MW220I | GPEC-XX-121812 | GPEC-MW220I |
| | | | Screen Zone | Shallow | Shallow | Shallow | Shallow | Shallow | Deep | Deep | Intermediate | Intermediate | Intermediate |
| | | | Sample Date | 12/17/2012 | 7/19/2019 | 11/21/2024 | 7/19/2019 | 11/21/2024 | 12/18/2012 | 11/13/2024 | 12/18/2012 | 12/18/2012 | 11/13/2024 |
| | | | Parent Sample Code | | | | | | | | | GPEC-MW-220I | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Perfluorononanoic Acid (PFNA) | | 375-95-1 | NE | NA | NA | **72** | NA | NA | NA | **2.36 J** | NA | NA | **4.12** |
| Perfluorooctanesulfonic acid (PFOS) | | 1763-23-1 | 2.7 | NA | NA | **13.9** | NA | NA | NA | **46.8** | NA | NA | **41.6** |
| Perfluorooctanoic Acid (PFOA) | | 335-67-1 | 6.7 | NA | NA | **275** | NA | NA | NA | **97.9** | NA | NA | **61.7** |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | NA | 0.4 U | NA | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | NA | 0.4 U | NA | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | ND | ND | ND | 0.05 U | ND | 0.05 U | 0.05 U | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | NA | 40 U | NA | 40 U | NA | 40 U | NA | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | NA | **1.2** | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | NA | **29.6** | NA | **66.5** | NA | **105** | NA | NA | **148** |
| Beryllium | | 7440-41-7 | 3* | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | NA | **109000** | NA | **79600** | NA | **116000** | NA | NA | **80300** |
| Chromium | | 7440-47-3 | 50 | NA | NA | **3.4** | NA | **10.9** | NA | 4 U | NA | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | NA | **0.55** | NA | 4 U | NA | **8.1** | NA | NA | 4 U |
| Copper | | 7440-50-8 | 200 | NA | NA | **5.5** | NA | 4 U | NA | 4 U | NA | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | NA | **60.8** | NA | 120 U | NA | 120 U | NA | NA | 120 U |
| Lead | | 7439-92-1 | 25 | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U | NA | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | NA | **34700** | NA | **25400** | NA | **37900** | NA | NA | **16800** |
| Manganese | | 7439-96-5 | 300 | NA | NA | **51.6** | NA | **60.1** | NA | **9190** | NA | NA | **48.1** |
| Mercury | | 7439-97-6 | 0.7 | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U | NA | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | NA | **1.4** | NA | 4 U | NA | **7.2** | NA | NA | **2.9 J** |
| Potassium | | 7440-09-7 | NE | NA | NA | **4440** | NA | **2090** | NA | **8200** | NA | NA | **7230** |
| Selenium | | 7782-49-2 | 10 | NA | NA | **1.9** | NA | **3.9** | NA | **1.1 J** | NA | NA | **1.9 J** |
| Silver | | 7440-22-4 | 50 | NA | NA | 2 U | NA | 2 U | NA | 2 U | NA | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | NA | **31600** | NA | **52400** | NA | **163000** | NA | NA | **132000** |
| Thallium | | 7440-28-0 | 0.5* | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U | NA | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | NA | 4 U | NA | 4 U | NA | 4 U | NA | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | NA | 16 U | NA | 16 U | NA | **21.8** | NA | NA | **13.3 J** |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | 40 U | **955** | NA | **670** | NA | **254** | NA | **22.6 J** | 40 U | NA |
| Antimony | | 7440-36-0 | 3 | 4 U | 2 U | NA | 2 U | NA | 4 U | NA | 4 U | 4 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **47.2** | **58.2** | NA | **53.7** | NA | **178** | NA | **121** | **130** | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | 1 U | NA | 1 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **110000** | **128000** | NA | **57400** | NA | **135000** | NA | **67600** | **66000** | NA |
| Chromium | | 7440-47-3 | 50 | **3.12 J** | **386** | NA | **9.04** | NA | 8 U | NA | 8 U | 8 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | 8 U | 2 U | NA | 2 U | NA | **6.87 J** | NA | **2.73 J** | **2.61 J** | NA |
| Copper | | 7440-50-8 | 200 | 8 U | **2.11** | NA | **3.04** | NA | 8 U | NA | 8 U | 8 U | NA |
| Iron | | 7439-89-6 | 300 | 100 U | **70.9 J** | NA | **1520** | NA | **2710** | NA | **93 J** | **70 J** | NA |
| Lead | | 7439-92-1 | 25 | 2 U | 2 U | NA | 2 U | NA | **0.625 J** | NA | 2 U | 2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **29000** | **2650** | NA | **18000** | NA | **41500** | NA | **16000** | **15600** | NA |
| Manganese | | 7439-96-5 | 300 | **151** | 2 U | NA | **90.2** | NA | **9310** | NA | **792** | **791** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA | 0.5 U | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | 4 U | 2 U | NA | **2.48** | NA | **9.36** | NA | **5.79** | **5.53** | NA |
| Potassium | | 7440-09-7 | NE | **2130** | **45800** | NA | **1650** | NA | **5320** | NA | **5090** | **4950** | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | 20 U | NA | 20 U | NA | 8 U | NA | 8 U | 8 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **42400** | **29600** | NA | **60900** | NA | **73600** | NA | **99100** | **96500** | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | 2 U | NA | 2 U | NA | 2 U | NA | 2 U | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | 8 U | **1.22 J** | NA | **1.33 J** | NA | 8 U | NA | 8 U | 8 U | NA |
| Zinc | | 7440-66-6 | 2000* | 8 U | 20 U | NA | **10.7 J** | NA | **7.88 J** | NA | **5.39 J** | **6.3 J** | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | 5 U | 5 U | 5 U | 5 U | 2 U | 5 U | 2 U | 2 U | 5 U |
| Total Cyanide | | 57-12-5 | 200 | **36** | **37** | **145** | **13 J** | **16.7** | 20 U | 10 U | **19 J** | **18 J** | **13.3** |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 1 | Supplemental | Supplemental | Phase 3 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 3 | Supplemental |
| | | | Location Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW513S | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Sample Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW-XX-061719 | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Screen Zone | Shallow | Shallow | Deep | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow | Shallow |
| | | | Sample Date | 12/18/2012 | 11/13/2024 | 10/29/2024 | 6/17/2019 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 |
| | | | Parent Sample Code | | | | | GPEC-MW513S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| **BTEX** | µg/L | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 1 | 1 U | 1 U | **0.22 J** | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Toluene | | 108-88-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Ethylbenzene | | 100-41-4 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| o-Xylene | | 95-47-6 | 5 | NA | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| m/p-Xylene | | 179601-23-1 | 5 | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| Total Xylene | | 1330-20-7 | 5 | 2 U | NA | NA | 1 U | 1 U | NA | 1 U | NA | 2 U | NA |
| Total BTEX | | TBTEX | NE | ND | ND | **0.22** | ND | ND | ND | ND | ND | ND | ND |
| **Other VOCs** | µg/L | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 50* | 5 U | 5 U | 5 U | 2 U | 2 U | 5 U | 2 U | 10 U | 4 U | 5 U |
| Acrolein (propenal) | | 107-02-8 | 5 | 20 U | NA | NA | 10 R | 10 R | NA | 10 R | NA | 20 R | NA |
| Acrylonitrile | | 107-13-1 | 5 | 20 U | NA | NA | 10 UJ | 10 UJ | NA | 10 UJ | NA | 20 UJ | NA |
| Bromochloromethane | | 74-97-5 | 5 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 UJ |
| Bromodichloromethane | | 75-27-4 | 50* | 1 U | 1 U* | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Bromoform | | 75-25-2 | 50* | 1 U | 1 U* | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Bromomethane | | 74-83-9 | 5 | 1 U | 1 U | 1 U* | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NA | NA | NA | 2 U | 2 U | NA | 2 U | NA | 4 U | NA |
| Carbon disulfide | | 75-15-0 | 60* | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| Carbon tetrachloride | | 56-23-5 | 5 | 1 U | 1 U* | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Chlorobenzene | | 108-90-7 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Chloroethane | | 75-00-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 2-Chloroethylvinylether | | 110-75-8 | NE | 1 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 4 U | NA |
| Chloroform | | 67-66-3 | 7 | 1 U | 1 U | 1 U | **1.2** | **1.21** | 1 U | 0.5 U | 2 U | **1.85** | **1.9** |
| Chloromethane | | 74-87-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Cyclohexane | | 110-82-7 | NE | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | 3 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | 3 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.04 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | 0.0006 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| Dibromochloromethane | | 124-48-1 | 50* | 1 U | 1 U* | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Dichlorodifluoromethane | | 75-71-8 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| 1,1-Dichloroethane | | 75-34-3 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.6 | 1 U | 1 U | **33** | 0.5 U | **0.983** | 1 U | **855** | **580** | 1 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.07 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | **0.749** | 2 U | 1 U | 1 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 5 | 1 U | 1 U | **3** | 0.5 U | 0.5 U | 1 U | **1.67** | **2.3** | **1.29** | **1** |
| trans-1,2-Dichloroethene | | 156-60-5 | 5 | 1 U | 1 U | **0.35 J** | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 1,3-Dichloropropane | | 142-28-9 | 5 | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.4 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.4 | 2 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Diisopropyl ether | | 108-20-3 | NE | 1 U | NA | NA | 0.5 U | 0.5 U | NA | 0.5 U | NA | 1 U | NA |
| 2-Hexanone | | 591-78-6 | 50* | 2 U | 5 U | 5 U | 1 U | 1 U | 5 U | 1 U | 10 U | 2 U | 5 U |
| Isopropylbenzene | | 98-82-8 | 5 | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 10* | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NE | 1 U | 5 U | 5 U | 1 U | 1 U | 5 U | 1 U | 10 U | 2 U | 5 U |
| Methylene chloride | | 75-09-2 | 5 | 2 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| Styrene | | 100-42-5 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Methyl acetate | | 79-20-9 | NE | NA | 5 U | 5 U | NA | NA | 5 U | NA | 10 U | NA | 5 U |
| Methylcyclohexane | | 108-87-2 | NE | NA | 1 U | 1 U | NA | NA | 1 U | NA | 2 U | NA | 1 U |
| 2-Butanone (Methyl ethyl ketone) | | 78-93-3 | 50* | 1 U | 5 U | 5 U | 2 U | 2 U | 5 U | 2 U | 10 U | 4 U | 5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| Tetrachloroethene | | 127-18-4 | 5 | **0.82 J** | 1 U | **1.8** | **1.35 J** | 0.5 UJ | **0.74 J** | **23.3** | **110** | **452** | **100** |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon-113) | | 76-13-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 5 | NA | 1 U | 1 U | NA | NA | 1 UJ | NA | 2 UJ | NA | 1 UJ |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| | | | Investigation Phase | Phase 1 | Supplemental | Supplemental | Phase 3 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 3 | Supplemental |
| | | | Location Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW513S | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Sample Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW-XX-061719 | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Screen Zone | Shallow | Shallow | Deep | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow | Shallow |
| | | | Sample Date | 12/18/2012 | 11/13/2024 | 10/29/2024 | 6/17/2019 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 |
| | | | Parent Sample Code | | | | | GPEC-MW513S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| Trichloroethene | | 79-01-6 | 5 | 1 U | 1 U | **2.5** | **0.717** | 0.5 U | 1 U | **58.2** | **89** | **6.73** | **1.4** |
| Trichlorofluoromethane | | 75-69-4 | 5 | 1 U | 1 U | 1 U | 0.5 U | 0.5 U | 1 U | 0.5 U | 2 U | 1 U | 1 U |
| 1,2,3-Trichloropropane | | 96-18-4 | 0.04 | 1 U | NA | NA | 1 U | 1 U | NA | 1 U | NA | 2 U | NA |
| Vinyl acetate | | 108-05-4 | NE | 1 U | NA | NA | 1 U | 1 U | NA | 1 U | NA | 2 U | NA |
| Vinyl chloride | | 75-01-4 | 2 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 U | 2 U | 1 U |
| Total VOCs | | TVOC | NE | **0.82** | ND | **40.87** | **3.267** | **2.193** | **0.74** | **938.919** | **781.3** | **461.87** | **104.3** |
| **PAHs** | µg/L | | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | 20* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Acenaphthylene | | 208-96-8 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Anthracene | | 120-12-7 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benzo[g,h,i]perylene | | 191-24-2 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluoranthene | | 206-44-0 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Fluorene | | 86-73-7 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Naphthalene | | 91-20-3 | 10* | 1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Phenanthrene | | 85-01-8 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyrene | | 129-00-0 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Benz[a]anthracene | | 56-55-3 | 0.002* | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[a]pyrene | | 50-32-8 | ND | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.002* | 0.1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.002* | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Chrysene | | 218-01-9 | 0.002* | 1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Dibenz[a,h]anthracene | | 53-70-3 | NE | 0.1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.002* | 0.1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Total PAHs | | TPAH | NE | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| **Other SVOCs** | µg/L | | | | | | | | | | | | |
| Acetophenone | | 98-86-2 | NE | NA | 10 U | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Aniline | | 62-53-3 | 5 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Atrazine | | 1912-24-9 | 7.5 | NA | 2 U | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Benzaldehyde | | 100-52-7 | NE | NA | 10 U | 10 U | NA | NA | 10 UJ | NA | 10 UJ | NA | 10 UJ |
| Benzidine | | 92-87-5 | 5 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Benzoic acid | | 65-85-0 | NE | NA | NA | NA | 10 U | 10 U | NA | 10 U | NA | 10 U | NA |
| Benzyl alcohol | | 100-51-6 | NE | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Biphenyl (1,1-Biphenyl) | | 92-52-4 | 5 | NA | 10 U | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 1 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 5 | 1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Butyl benzyl phthalate | | 85-68-7 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Caprolactam | | 105-60-2 | NE | NA | 10 U | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| Carbazole | | 86-74-8 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chloroaniline | | 106-47-8 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chloronaphthalene | | 91-58-7 | 10* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Chlorophenol | | 95-57-8 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dibenzofuran | | 132-64-9 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 3 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 3 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 3 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dichlorophenol | | 120-83-2 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Diethyl phthalate | | 84-66-2 | 50* | 1 U | **1 J** | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Dimethyl phthalate | | 131-11-3 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4-Dimethylphenol | | 105-67-9 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Di-n-butyl phthalate | | 84-74-2 | 50 | 1 U | 10 U | 10 U | **0.224 J** | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | NE | 1 U | 20 U | 20 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| 2,4-Dinitrophenol | | 51-28-5 | 10* | 1 U | 40 U | 40 U | 1 U | 1 U | 40 U | 1 U | 40 U | 1 U | 40 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 5 | 1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| | | | Area | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Investigation Phase | Phase 1 | Supplemental | Supplemental | Phase 3 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 3 | Supplemental |
| | | | Location Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW513S | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Sample Name | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW-XX-061719 | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| | | | Screen Zone | Shallow | Shallow | Deep | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow | Shallow |
| | | | Sample Date | 12/18/2012 | 11/13/2024 | 10/29/2024 | 6/17/2019 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 |
| | | | Parent Sample Code | | | | | GPEC-MW513S | | | | | |
| **Analyte** | **Units** | **CAS no.** | **NYS AWQS** | | | | | | | | | | |
| Di-n-octyl phthalate | | 117-84-0 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 1,2-Diphenylhydrazine | | 122-66-7 | 0 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Hexachlorobenzene | | 118-74-1 | 0.04 | 0.02 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorobutadiene | | 87-68-3 | 0.5 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| Hexachlorocyclopentadiene | | 77-47-4 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Hexachloroethane | | 67-72-1 | 5 | 1 U | 2 U | 2 U | 1 U | 1 U | 2 U | 1 U | 2 U | 1 U | 2 U |
| Isophorone | | 78-59-1 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Methylphenol (o-Cresol) | | 95-48-7 | 1 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 1 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2-Nitroaniline | | 88-74-4 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 3-Nitroaniline | | 99-09-2 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitroaniline | | 100-01-6 | 5 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Nitrobenzene | | 98-95-3 | 0.4 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| 2-Nitrophenol | | 88-75-5 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 4-Nitrophenol | | 100-02-7 | NE | 1 U | 20 U | 20 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| N-Nitrosodi-n-propylamine | | 621-64-7 | NE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-Nitrosodimethylamine (NDMA) | | 62-75-9 | NE | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| N-Nitrosodiphenylamine | | 86-30-6 | 50* | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pentachlorophenol | | 87-86-5 | 1 | 0.1 U | 20 U | 20 U | 1 U | 1 U | 20 U | 1 U | 20 U | 1 U | 20 U |
| Phenol | | 108-95-2 | 1 | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Pyridine | | 110-86-1 | 50* | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 5 | NA | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 5 | NA | 10 U | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NE | NA | 10 U | 10 U | NA | NA | 10 U | NA | 10 U | NA | 10 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | NE | 1 U | 10 U | 10 U | 1 U | 1 U | 10 U | 1 U | 10 U | 1 U | 10 U |
| Total SVOCs | | TSVOC | NE | ND | **1** | ND | **0.224** | ND | ND | ND | ND | ND | ND |
| **PFAS** | ng/L | | | | | | | | | | | | |
| 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS) | | 763051-92-9 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| 2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) | | 914637-49-3 | NE | NA | 118 U | NA | NA | NA | 99 U | NA | 78.1 U | NA | NA |
| 3-Perfluoroheptyl Propanoic Acid (7:3FTCA) | | 812-70-4 | NE | NA | 118 U | NA | NA | NA | 99 U | NA | 78.1 U | NA | NA |
| 3-Perfluoropropyl Propanoic Acid (3:3FTCA) | | 356-02-5 | NE | NA | 23.7 U | NA | NA | NA | 19.8 U | NA | 15.6 U | NA | NA |
| 4,8-Dioxa-3H-perfluorononanoic acid (ADONA) | | 919005-14-4 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| 9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS) | | 756426-58-1 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| N-Ethyl Perfluorooctane Sulfonamide (NEtFOSA) | | 4151-50-2 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) | | 1691-99-2 | NE | NA | 47.3 U | NA | NA | NA | 39.6 U | NA | 31.3 U | NA | NA |
| N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA) | | 2991-50-6 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) | | 31506-32-8 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) | | 24448-09-7 | NE | NA | 47.3 U | NA | NA | NA | 39.6 U | NA | 31.3 U | NA | NA |
| N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA) | | 2355-31-9 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Nonafluoro-3,6-dioxaheptanoic acid (NFDHA) | | 151772-58-6 | NE | NA | 9.47 U | NA | NA | NA | 7.92 U | NA | 6.25 U | NA | NA |
| Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA) | | 113507-82-7 | NE | NA | 9.47 U | NA | NA | NA | 7.92 U | NA | 6.25 U | NA | NA |
| Perfluoro(2-Propoxypropanoic) Acid | | 13252-13-6 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| Perfluoro-3-methoxypropanoic acid (PFMPA) | | 377-73-1 | NE | NA | 9.47 U | NA | NA | NA | 7.92 U | NA | 6.25 U | NA | NA |
| Perfluoro-4-methoxybutanoic acid (PFMBA) | | 863090-89-5 | NE | NA | 9.47 U | NA | NA | NA | 7.92 U | NA | 6.25 U | NA | NA |
| Perfluorobutanesulfonic acid (PFBS) | | 375-73-5 | NE | NA | **4.13 J** | NA | NA | NA | **2.9 J** | NA | 3.13 U | NA | NA |
| Perfluorobutanoic acid (PFBA) | | 375-22-4 | NE | NA | **20.7** | NA | NA | NA | **14.4 J** | NA | 12.5 U | NA | NA |
| Perfluorodecanesulfonic acid (PFDS) | | 335-77-3 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluorodecanoic acid (PFDA) | | 335-76-2 | NE | NA | 4.73 U | NA | NA | NA | **1.46 J** | NA | 3.13 U | NA | NA |
| Perfluorododecanesulfonic Acid (PFDoS) | | 79780-39-5 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluorododecanoic acid (PFDoA) | | 307-55-1 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluoroheptanesulfonic acid (PFHpS) | | 375-92-8 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluoroheptanoic acid (PFHpA) | | 375-85-9 | NE | NA | **15.7** | NA | NA | NA | **5.06** | NA | 3.13 U | NA | NA |
| Perfluorohexanoic acid (PFHxA) | | 307-24-4 | NE | NA | **15.6** | NA | NA | NA | **12.8** | NA | 3.13 U | NA | NA |
| Perfluorononanesulfonic Acid (Pfns) | | 68259-12-1 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluorooctanesulfonamide (FOSA) | | 754-91-6 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluoropentanesulfonic Acid (Pfpes) | | 2706-91-4 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluoropentanoic Acid (PFPeA) | | 2706-90-3 | NE | NA | **12.9** | NA | NA | NA | **18.3** | NA | 6.25 U | NA | NA |
| Perfluorotetradecanoic acid (PFTA/PFTeDA) | | 376-06-7 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluorotridecanoic acid (PFTriA/PFTrDA) | | 72629-94-8 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Perfluoroundecanoic acid (PFUnA) | | 2058-94-8 | NE | NA | 4.73 U | NA | NA | NA | 3.96 U | NA | 3.13 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorodecane Sulfonate (8:2) | | 39108-34-4 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorohexane Sulfonate (4:2) | | 757124-72-4 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| Sodium 1H,1H,2H,2H-Perfluorooctane Sulfonate (6:2) | | 27619-97-2 | NE | NA | 18.9 U | NA | NA | NA | 15.8 U | NA | 12.5 U | NA | NA |
| Perfluorohexanesulfonic acid (PFHxS) | | 355-46-4 | NE | NA | **2.89 J** | NA | NA | NA | **2.49 J** | NA | **1.56 J** | NA | NA |

**Table 16. Groundwater Analytical Results Site Interior**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

| Analyte | Units | CAS no. | NYS AWQS | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Area** | | | | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 | Area 9 |
| **Investigation Phase** | | | | Phase 1 | Supplemental | Supplemental | Phase 3 | Phase 3 | Supplemental | Phase 3 | Supplemental | Phase 3 | Supplemental |
| **Location Name** | | | | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW513S | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| **Sample Name** | | | | GPEC-MW220S | GPEC-MW220S | GPEC-MW401 | GPEC-MW513S | GPEC-MW-XX-061719 | GPEC-MW513S | GPEC-MW513D | GPEC-MW513D | GPEC-MW514 | GPEC-MW514 |
| **Screen Zone** | | | | Shallow | Shallow | Deep | Shallow | Shallow | Shallow | Intermediate | Intermediate | Shallow | Shallow |
| **Sample Date** | | | | 12/18/2012 | 11/13/2024 | 10/29/2024 | 6/17/2019 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 | 6/17/2019 | 11/15/2024 |
| **Parent Sample Code** | | | | | | | | GPEC-MW513S | | | | | |
| **PCBs** | µg/L | | | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1221 | | 11104-28-2 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1232 | | 11141-16-5 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1242 | | 53469-21-9 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1248 | | 12672-29-6 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1254 | | 11097-69-1 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1260 | | 11096-82-5 | NE | 0.05 U | 0.4 U | 0.4 U | 0.05 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U | 0.05 U | 0.4 U |
| Aroclor 1262 | | 37324-23-5 | NE | 0.05 U | 0.4 U | 0.4 U | NA | NA | 0.4 U | NA | 0.4 U | NA | 0.4 U |
| Aroclor 1268 | | 11100-14-4 | NE | 0.05 U | 0.4 U | 0.4 U | NA | NA | 0.4 U | NA | 0.4 U | NA | 0.4 U |
| Total PCBs | | 1336-36-3 | 0.09 | 0.05 U | ND | ND | 0.05 U | 0.05 U | ND | 0.05 U | ND | 0.05 U | ND |
| **Dissolved Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | NA | 40 U | 40 U | NA | NA | 40 U | NA | 40 U | NA | 40 U |
| Antimony | | 7440-36-0 | 3 | NA | 2 U | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Arsenic | | 7440-38-2 | 25 | NA | 2 U | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Barium | | 7440-39-3 | 1000 | NA | **86.8** | **37.8** | NA | NA | **57.1** | NA | **32.9** | NA | **53.5** |
| Beryllium | | 7440-41-7 | 3* | NA | 0.8 U | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Cadmium | | 7440-43-9 | 5 | NA | 2 U | 2 U | NA | NA | 2 U | NA | **0.52 J** | NA | 2 U |
| Calcium | | 7440-70-2 | NE | NA | **491000** | **192000** | NA | NA | **80000** | NA | **218000** | NA | **47800** |
| Chromium | | 7440-47-3 | 50 | NA | 4 U | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Cobalt | | 7440-48-4 | NE | NA | **0.95 J** | **10.9** | NA | NA | **11.9** | NA | **8.3** | NA | **1.1 J** |
| Copper | | 7440-50-8 | 200 | NA | 4 U | 4 U | NA | NA | **7.7** | NA | 4 U | NA | 4 U |
| Iron | | 7439-89-6 | 300 | NA | 120 U | **1910** | NA | NA | 120 U | NA | **4690** | NA | **101 J** |
| Lead | | 7439-92-1 | 25 | NA | 1.2 U | 1.2 U | NA | NA | 1.2 U | NA | 1.2 U | NA | 1.2 U |
| Magnesium | | 7439-95-4 | 35000* | NA | **32400** | **97100** | NA | NA | **10800** | NA | **150000** | NA | **19600** |
| Manganese | | 7439-96-5 | 300 | NA | **695** | **9140** | NA | NA | **28.9** | NA | **12100** | NA | **276** |
| Mercury | | 7439-97-6 | 0.7 | NA | 0.2 U | 0.2 U | NA | NA | 0.2 U | NA | 0.2 U | NA | 0.2 U |
| Nickel | | 7440-02-0 | 100 | NA | 4 U | **5** | NA | NA | **15.2** | NA | **3.5 J** | NA | **2.8 J** |
| Potassium | | 7440-09-7 | NE | NA | **19800** | **10800** | NA | NA | **5360** | NA | **10200** | NA | **2820** |
| Selenium | | 7782-49-2 | 10 | NA | **5.7** | 2.5 U | NA | NA | **2.9** | NA | 2.5 U | NA | **4.2** |
| Silver | | 7440-22-4 | 50 | NA | 2 U | 2 U | NA | NA | 2 U | NA | 2 U | NA | 2 U |
| Sodium | | 7440-23-5 | 20000 | NA | **839000** | **497000** | NA | NA | **142000** | NA | **766000** | NA | **105000** |
| Thallium | | 7440-28-0 | 0.5* | NA | 0.8 U | 0.8 U | NA | NA | 0.8 U | NA | 0.8 U | NA | 0.8 U |
| Vanadium | | 7440-62-2 | NE | NA | 4 U | 4 U | NA | NA | 4 U | NA | 4 U | NA | 4 U |
| Zinc | | 7440-66-6 | 2000* | NA | **10.1 J** | **4.5 J** | NA | NA | 16 U | NA | **22.4** | NA | 16 U |
| **Total Metals** | µg/L | | | | | | | | | | | | |
| Aluminum | | 7429-90-5 | NE | **210** | NA | NA | **54.9** | **62.9** | NA | **133** | NA | **41.7** | NA |
| Antimony | | 7440-36-0 | 3 | 4 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Arsenic | | 7440-38-2 | 25 | 2 U | NA | NA | 2 U | 2 U | NA | **3.91** | NA | 2 U | NA |
| Barium | | 7440-39-3 | 1000 | **104** | NA | NA | **48.8** | **47** | NA | **43.7** | NA | **87.8** | NA |
| Beryllium | | 7440-41-7 | 3* | 2 U | NA | NA | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| Cadmium | | 7440-43-9 | 5 | 2 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Calcium | | 7440-70-2 | NE | **280000** | NA | NA | **168000** | **163000** | NA | **202000** | NA | **54000** | NA |
| Chromium | | 7440-47-3 | 50 | 8 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Chromium (VI) | | 18540-29-9 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | NE | **7.15 J** | NA | NA | **9.35** | **9.26** | NA | **8.99** | NA | **4.52** | NA |
| Copper | | 7440-50-8 | 200 | 8 U | NA | NA | **2.21** | **2.32** | NA | 2 U | NA | 2 U | NA |
| Iron | | 7439-89-6 | 300 | **520** | NA | NA | **236** | **224** | NA | **12600** | NA | **2660** | NA |
| Lead | | 7439-92-1 | 25 | **8.38** | NA | NA | **1.36 J** | 2 U | NA | 2 U | NA | 2 U | NA |
| Magnesium | | 7439-95-4 | 35000* | **20500** | NA | NA | **17500** | **17100** | NA | **142000** | NA | **18900** | NA |
| Manganese | | 7439-96-5 | 300 | **6660** | NA | NA | **1440** | **1400** | NA | **12700** | NA | **2130** | NA |
| Mercury | | 7439-97-6 | 0.7 | 0.5 U | NA | NA | 0.5 U | 0.5 U | NA | 0.5 U | NA | 0.5 U | NA |
| Nickel | | 7440-02-0 | 100 | **4.04** | NA | NA | **15.2** | **13.8** | NA | **2.23** | NA | **7.11** | NA |
| Potassium | | 7440-09-7 | NE | **13800** | NA | NA | **6440** | **6220** | NA | **9540** | NA | **3310** | NA |
| Selenium | | 7782-49-2 | 10 | 8 U | NA | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA |
| Silver | | 7440-22-4 | 50 | 2 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Sodium | | 7440-23-5 | 20000 | **322000** | NA | NA | **51800** | **50600** | NA | **918000** | NA | **67800** | NA |
| Thallium | | 7440-28-0 | 0.5* | 2 U | NA | NA | 2 U | 2 U | NA | 2 U | NA | 2 U | NA |
| Vanadium | | 7440-62-2 | NE | 8 U | NA | NA | 2 U | 2 U | NA | **0.807 J** | NA | 2 U | NA |
| Zinc | | 7440-66-6 | 2000* | **7.02 J** | NA | NA | 20 U | 20 U | NA | 20 U | NA | 20 U | NA |
| **Cyanides** | µg/L | | | | | | | | | | | | |
| Free Cyanide | | FREECN | NE | 2 U | 5 U | **13.4** | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U | 5 U |
| Total Cyanide | | 57-12-5 | 200 | **27** | **32.3** | **80.8** | **26** | **27** | **33.1** | **52** | **12.2** | 20 U | **31.8** |
| **Other** | µg/L | | | | | | | | | | | | |
| Nitrate as Nitrogen | | 14797-55-8 | 10000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfate | | 14808-79-8 | 250000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Notes for Tables 14, 15 & 16**
**Groundwater Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

**Notes:**

µg/L - micrograms per liter or parts per billion (ppb)
S.U. - standard units
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
PCBs - polychlorinated biphenyls
PFAS = Per- and polyfluoroalkyl substances
SVOCs - semivolatile organic compounds

Total BTEX, Total VOCs, Total PAHs, Total SVOCs, and Total PCBs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

NYS AWQS - New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard
NE - not established
NA - not analyzed
ND - not detected; total concentration is listed as ND because no compounds were detected in the group

Bolding indicates a detected concentration
Gray shading indicates that the detected result value exceeds NYS AWQS

**Data Qualifiers:**

* = The duplicate result was not within control limits.
B - Analyte detected in the associated method blank
D - Results for dilution
HF - Analysis was performed in the laboratory outside the 15 minute timeframe
J - Estimated value
R - Rejected
U - Indicates not detected to the reporting limit
UH = The results was not detected above the reporting limit for organic analysis and the method detection limit for inorganic analysis and the sample was prepared or analyzed beyond the holding time.
UJ - Not detected at or above the reporting limit shown and the reporting limit is estimated

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Transportation Building (Building D) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Soil Vapor | | | | | Indoor Air | | Indoor Air | | | Outdoor Air | |
| Sample Name | | | | | GPEC-SV315 | GPEC-SVXX-03242018 | GPEC-SV316 | GPEC-SV317 | GPEC-SV318 | GPEC-IA315 | GPEC-IA316 | GPEC-IA317 | GPEC-IAXX-03242018 | GPEC-IA318 | GPEC-OA TRANSPORTATION |
| Sample Date | | | | | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 |
| Parent Sample | | | | | | GPEC-SV315 | | | | | | | GPEC-IA317 | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| **BTEX** | µg/m$^3$ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **3.3** | **2.3 J** | 3900 U | **13** | **2.6** | **2.9** | **3.5** | **3.8** | **3.9** | **0.27** | **0.45** |
| Toluene | | 108-88-3 | 43 | NE | **8.9** | **6.7** | 7000 U | **16** | **6.5** | **6.7** | **7.1** | **13** | **13** | 0.45 U | **0.99** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **1.4 J** | **1.2 J** | 5400 U | **2.5 J** | 3.5 U | **0.9** | **1** | **2.6** | **2.7** | 0.35 U | **0.13 J** |
| o-Xylene | | 95-47-6 | 7.9 | NE | **1.9 J** | **1.6 J** | 5400 U | **3 J** | **1.2 J** | **1.1** | **1.3** | **2.8** | **3.1** | 0.35 U | **0.15 J** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **5.3** | **4.4** | 5400 U | **8.6** | **3.2 J** | **3.3** | **4** | **8.4** | **9** | 0.35 U | **0.46** |
| **Other VOCs** | µg/m$^3$ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **100** | **90** | **84000 J** | **590** | **79** | **28** | **27** | **460** | **540** | **9.2** | **18 J** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 2.5 U | 2.5 U | 3900 U | 2.5 U | 2.5 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 8.3 U | 8.3 U | 13000 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 5.4 U | 5.4 U | 8300 U | 5.4 U | 5.4 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 8.3 U | 8.3 U | 13000 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 3.1 U | 3.1 U | 4800 U | 3.1 U | 3.1 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 3.5 U | 3.5 U | 5500 U | 3.5 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| Butane | | 106-97-8 | NE | NE | **5.9** | **4.8** | **18000** | **170** | **5.1** | **33** | **38** | **140** | **140** | **6.2** | **3** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | **15** | **11** | 15000 U | **20** | **13** | 0.97 U | 0.97 U | **0.53 J** | **0.82 J** | 0.97 U | **0.17 J** |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **7.3** | **11** | **5700 J** | **26** | **4 J** | **0.2 J** | **0.16 J** | **0.09 J** | **0.38 J** | **0.11 J** | 0.62 U |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **1.6 J** | **1.7 J** | 3100 U | 2 U | 2 U | **0.42** | **0.45** | **0.44** | **0.5** | **0.39** | **0.43** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 3.7 U | 3.7 U | 5700 U | 3.7 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 2.1 U | 2.1 U | 3300 U | 2.1 U | 2.1 U | **0.042 J** | **0.044 J** | **0.042 J** | **0.055 J** | 0.21 U | 0.21 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | 3.9 U | 3.9 U | 6000 U | 3.9 U | **1.1 J** | **0.13 J** | **0.18 J** | **0.2 J** | **0.2 J** | **0.11 J** | **0.11 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | 4.1 U | 4.1 U | **2500 J** | **2.6 J** | **1.4 J** | **1.4** | **1.5** | **1.4** | **1.5** | **1.1** | **1.3** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 8.3 U | 8.3 U | 13000 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | 5.6 U | 5.6 U | 8600 U | 5.6 U | 5.6 U | **0.11 J** | **0.11 J** | **0.11 J** | **0.12 J** | **0.11 J** | **0.12 J** |
| Cyclohexane | | 110-82-7 | NE | NE | **1.2 J** | 6.9 U | **14000** | **4.3 J** | **0.62 J** | **1.4** | **1.7** | **2.8** | **3** | **0.33 J** | **0.11 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **21 J** | **11 J** | 36000 U | **26** | **14 J** | **1.4 J** | **1.7 J** | **6** | **7** | 2.3 U | **0.34 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 6.8 U | 6.8 U | 10000 U | 6.8 U | 6.8 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 6.1 U | 6.1 U | 9500 U | 6.1 U | 6.1 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 4.8 U | 4.8 U | 7400 U | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 4.8 U | 4.8 U | 7400 U | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 4.8 U | 4.8 U | 7400 U | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **3.2 J** | **3.2 J** | 6100 U | **2.9 J** | **3.5 J** | **2.5** | **2.7** | **2.6** | **2.9** | **2.8** | **2.7** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | **3.1 J** | **2.6 J** | 5000 U | **33** | **3.9** | 0.32 U | 0.32 U | 0.32 U | **0.046 J** | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 3.2 U | 3.2 U | 5000 U | 3.2 U | 3.2 U | 0.32 U | **0.077 J** | **0.079 J** | **0.088 J** | 0.32 U | 0.32 U |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 1.6 U | 1.6 U | 2400 U | 1.6 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 1.6 U | 1.6 U | **3900** | 1.6 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 3.2 U | 3.2 U | 4900 U | 3.2 U | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 3.7 U | 3.7 U | 5700 U | 3.7 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 3.6 U | 3.6 U | 5600 U | 3.6 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 3.6 U | 3.6 U | 5600 U | 3.6 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 7.2 U | 7.2 U | 11000 U | 7.2 U | 7.2 U | 0.72 U | 0.72 U | **0.17 J** | 0.72 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | **8.1 J** | 28 U | 43000 U | **14 J** | **4.6 J** | **0.79 J** | **1 J** | **12** | **15** | 2.8 U | 2.8 U |
| Ethanol | | 64-17-5 | 210 | NE | **910 J** | **620 J** | **32000 J** | **980** | **610** | **60** | **69** | **110** | **130** | **20** | **8.3** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 7.9 U | 7.9 U | 12000 U | 7.9 U | 7.9 U | **0.4 J** | **0.44 J** | **1** | **1** | 0.79 U | 0.79 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Transportation Building (Building D) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Soil Vapor | | | | | Indoor Air | | Indoor Air | | | Outdoor Air | |
| Sample Name | | | | | GPEC-SV315 | GPEC-SVXX-03242018 | GPEC-SV316 | GPEC-SV317 | GPEC-SV318 | GPEC-IA315 | GPEC-IA316 | GPEC-IA317 | GPEC-IAXX-03242018 | GPEC-IA318 | GPEC-OA TRANSPORTATION |
| Sample Date | | | | | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 |
| Parent Sample | | | | | | GPEC-SV315 | | | | | | | GPEC-IA317 | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **10** | **6.7 J** | **3600 J** | **72** | **7 J** | **1.9** | **2.1** | **42** | **46** | 0.82 U | **0.16 J** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 8.5 U | 8.5 U | 13000 U | 8.5 U | 8.5 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **3.7 J** | **3 J** | **32000** | **16** | **3 J** | **4.3** | **5.4** | **9.9** | **11** | **3** | **0.4 J** |
| 2-Hexanone | | 591-78-6 | NE | NE | 8.2 U | 8.2 U | 13000 U | 8.2 U | 8.2 U | **0.21 J** | **0.3 J** | 0.82 U | **0.19 J** | 0.82 U | **0.31 J** |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **18** | **16** | **9700 J** | **15** | **12** | **3.3** | **4.1** | **2.3** | **2.5** | **0.78 J** | **2.2** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 5.8 U | 5.8 U | 8900 U | 5.8 U | 5.8 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 8.2 U | 8.2 U | 13000 U | 8.2 U | 8.2 U | **1.8** | **2** | **1.7** | **1.9** | **0.4 J** | **0.36 J** |
| Methylene chloride | | 75-09-2 | 10 | 60 | **4.9 J** | **5 J** | **12000** | **5.5 J** | **5.3 J** | **1.1** | **1** | **1.3** | **1.4** | **1.8** | **1.1** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 58 UJ | 58 UJ | 90000 UJ | 58 UJ | 58 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 58 UJ | 58 UJ | 90000 UJ | 58 UJ | 58 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ |
| Naphthalene | | 91-20-3 | 5.1 | NE | 10 U | 10 UJ | 16000 U | 10 U | 10 U | **0.21 J** | **0.35 J** | **0.3 J** | **0.39 J** | 1 UJ | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **2.7 J** | **1.4 J** | 16000 U | **4 J** | **1.9 J** | **0.85 J** | **0.93 J** | **2.9** | **3** | 1 U | **0.22 J** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **7.6** | **6.1 J** | 12000 U | **47** | **12** | **0.8** | **0.9** | **2.3** | **2.5** | 0.75 U | **0.14 J** |
| Pentane | | 109-66-0 | NE | NE | **5.6 J** | 12 U | **30000** | **49** | 12 U | **20** | **23** | **49** | **39** | **4.2** | **1 J** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **51** | **33** | 30000 U | **43** | **30** | **7.3** | **8.9** | **37** | **42** | **2.2** | **1.5 J** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 3.4 U | 3.4 U | 5200 U | 3.4 U | 3.4 U | **0.11 J** | **0.14 J** | **0.14 J** | **0.15 J** | 0.34 U | 0.34 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 5.5 U | 5.5 U | 8500 U | 5.5 U | 5.5 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **1.1 J** | 5.4 U | **6100 J** | **1.1 J** | 5.4 U | **0.37 J** | **0.42 J** | **0.42 J** | **0.43 J** | 0.54 U | **0.29 J** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | 6.1 U | 6.1 U | 9400 U | 6.1 U | 6.1 U | **0.51 J** | **0.55 J** | **0.55 J** | **0.62** | **0.54 J** | **0.52 J** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 5.9 U | 5.9 U | 9100 U | 5.9 U | 5.9 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | **360** | **350** | **1100 J** | **50** | **0.66 J** | **0.18 J** | **0.087 J** | **0.52** | **0.94** | 0.44 U | 0.44 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 4.4 U | 4.4 U | 6700 U | 4.4 U | 4.4 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 1.9 U | 1.9 U | **2800 J** | 1.9 U | 1.9 U | 0.19 U | 0.19 U | **0.13 J** | **0.1 J** | 0.19 U | 0.19 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **2.1 J** | **2 J** | 6900 U | **1.9 J** | **1.3 J** | **1.4** | **1.5** | **1.4** | **1.6** | **1.6** | **1.3** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 3.9 U | 3.9 U | 6100 U | 3.9 U | 3.9 U | **0.27 J** | **0.33 J** | **0.78** | **0.84** | 0.39 U | 0.39 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **3.3 J** | **2.8 J** | 6100 U | **4.1** | **1.9 J** | **1** | **1.3** | **2.8** | **3** | 0.39 U | **0.13 J** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 3.9 U | 3.9 U | 6100 U | 3.9 U | 3.9 U | **0.3 J** | **0.37 J** | **0.76** | **0.8** | 0.39 U | 0.39 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **2.6 J** | **1.8 J** | **340000** | **11** | **1 J** | **5.8** | **7.4** | **13** | **14** | 0.93 U | **0.16 J** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **6.6 J** | **3.5 J** | 39000 U | **17 J** | **3.4 J** | **1.4 J** | **1.5 J** | **29** | **33** | 2.6 UJ | **0.19 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 3.5 U | 3.5 U | 5400 U | 3.5 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 1 U | 1 U | 1600 U | 1 U | 1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Transportation Building (Building D) | Stores Building (Building C) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Outdoor Air | Soil Vapor | | | | Indoor Air | | | | Outdoor Air | Soil Vapor |
| Sample Name | | | | | GPEC-OAXX-03242018 | GPEC-SV319 | GPEC-SV320 | GPEC-SV321 | GPEC-SV322 | GPEC-IA319 | GPEC-IA320 | GPEC-IA321 | GPEC-IA322 | GPEC-OASTORES | GPEC-SV319 |
| Sample Date | | | | | 3/24/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/21/2019 |
| Parent Sample | | | | | GPEC-OA TRANSPORTATION | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **0.42** | 120 U | 74 U | **1.3 J** | **0.74** | **0.5** | **4.4** | **0.39** | **0.39** | **0.38** | 64 U |
| Toluene | | 108-88-3 | 43 | NE | **1** | 220 U | 130 U | **14** | **13** | **11** | **29** | **6.4** | **7.1** | 0.45 U | 110 U |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **0.14 J** | 170 U | 100 U | **1.6 J** | **2.9** | **0.51** | **9.9** | **0.25 J** | **0.22 J** | 0.35 U | 86 U |
| o-Xylene | | 95-47-6 | 7.9 | NE | **0.15 J** | 170 U | 100 U | **2.4 J** | **4.5** | **0.69** | **11** | **0.33 J** | **0.29 J** | **0.11 J** | 86 U |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **0.49** | 170 U | 100 U | **5.7** | **10** | **1.9** | **38** | **0.92** | **0.79** | **0.3 J** | 86 U |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **4.5 J** | 2300 U | 1400 U | **98** | **99** | **20** | **68** | **10** | **9.4** | **4.7** | 1200 U |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.25 U | 120 U | 73 U | 2.5 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 62 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 0.83 U | 400 U | 240 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 210 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 0.54 U | 260 U | 160 U | 5.4 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 130 U |
| Bromoform | | 75-25-2 | NE | NE | 0.83 U | 400 U | 240 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 210 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 0.31 U | 150 U | 90 U | 3.1 U | **0.091 J** | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 77 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 0.35 U | 170 U | 100 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 88 U |
| Butane | | 106-97-8 | NE | NE | **2.4** | 190 U | 110 U | **4.4** | **4.6** | **8.3** | **34** | **3.1** | **3** | **2** | 95 U |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | 0.97 U | 470 U | 280 U | **44** | **33** | **0.74 J** | **0.38 J** | 0.97 U | 0.97 U | 0.97 U | 240 U |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **0.07 J** | 300 U | 180 U | **2.2 J** | **1.7** | **0.24 J** | **0.5 J** | **0.22 J** | **0.22 J** | **0.18 J** | **22 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.56** | 98 U | 58 U | 2 U | **1.1** | **0.67** | **0.58** | **0.59** | **0.62** | **0.67** | 50 U |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 0.37 U | 180 U | 110 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 92 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.21 U | 100 U | 61 U | 2.1 U | **0.082 J** | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 53 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **0.1 J** | 190 U | 110 U | **1.5 J** | **1** | **0.15 J** | **0.16 J** | **0.12 J** | **0.13 J** | **0.11 J** | 97 U |
| Chloromethane | | 74-87-3 | 3.7 | NE | **1.1** | 200 U | 120 U | 4.1 U | **0.68** | **1.4** | **1.2** | **1.2** | **1.3** | **1.3** | 100 U |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 0.83 U | 400 U | 240 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 210 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | **0.12 J** | 270 U | 160 U | 5.6 U | 0.56 U | **0.16 J** | **0.12 J** | **0.15 J** | **0.16 J** | **0.15 J** | 140 U |
| Cyclohexane | | 110-82-7 | NE | NE | **0.082 J** | 340 U | 200 U | 6.9 U | **0.79** | **1** | **3.8** | **0.31 J** | **0.29 J** | 0.69 U | 170 U |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **0.31 J** | 1100 U | **40 J** | **13 J** | **82** | **1.7 J** | **25** | **0.72 J** | **0.74 J** | **0.26 J** | 580 U |
| Dibromochloromethane | | 124-48-1 | NE | NE | 0.68 U | 330 U | 200 U | 6.8 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 170 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 0.61 U | 300 U | 180 U | 6.1 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 150 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 0.48 U | 230 U | 140 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 120 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 0.48 U | 230 U | 140 U | **7.7** | **12** | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 120 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 0.48 U | 230 U | 140 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 120 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **2.8** | 190 U | 110 U | **2.8 J** | **2.7** | **3.6** | **2.9** | **2.9** | **3.1** | **3.2** | 99 U |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 0.32 U | **46 J** | 94 U | **20** | **10** | 0.32 U | **0.076 J** | 0.32 U | 0.32 U | 0.32 U | **53 J** |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 0.32 U | 160 U | 94 U | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 81 U |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.16 U | 77 U | 46 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 39 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.16 U | 77 U | 46 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 39 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 0.32 U | 150 U | 92 U | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 79 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 0.37 U | 180 U | 110 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 92 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 0.36 U | 180 U | 110 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 90 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 0.36 U | 180 U | 110 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 90 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 0.72 U | 350 U | 210 U | 7.2 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 180 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 2.8 U | 1400 U | 810 U | **2.2 J** | **2 J** | **3.4** | **21** | **1.2 J** | **0.84 J** | 2.8 U | 690 U |
| Ethanol | | 64-17-5 | 210 | NE | **5.4** | 1800 U | 1100 U | **370** | **380** | **30** | **97** | **17** | **16** | **4.1** | 940 U |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 0.79 U | 380 U | 230 U | 7.9 U | **4.4 CI** | **0.17 J** | **2.9** | 0.79 U | **0.13 J** | 0.79 U | 200 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 200 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Transportation Building (Building D) | Stores Building (Building C) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Outdoor Air | Soil Vapor | | | | Indoor Air | | | | Outdoor Air | Soil Vapor |
| Sample Name | | | | | GPEC-OAXX-03242018 | GPEC-SV319 | GPEC-SV320 | GPEC-SV321 | GPEC-SV322 | GPEC-IA319 | GPEC-IA320 | GPEC-IA321 | GPEC-IA322 | GPEC-OASTORES | GPEC-SV319 |
| Sample Date | | | | | 3/24/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/21/2019 |
| Parent Sample | | | | | GPEC-OA TRANSPORTATION | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **0.17 J** | 400 U | 240 U | 8.2 U | **1.8** | **0.62 J** | **5.3** | **0.17 J** | **0.19 J** | **0.12 J** | NA |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 0.85 U | 420 U | 250 U | 8.5 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 210 UJ |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **0.33 J** | 340 U | 200 U | **1 J** | **2** | **1.2** | **10** | **1.1** | **1.1** | **0.23 J** | 180 U |
| 2-Hexanone | | 591-78-6 | NE | NE | 0.82 U | 400 U | 240 U | 8.2 U | **1.7** | 0.82 U | **0.14 J** | 0.82 U | 0.82 U | 0.82 U | 200 UJ |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1200 U |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1200 U |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **0.49 J** | 460 U | 270 U | **44** | **42** | **2.1** | **4.2** | **2.2** | **1.7** | **0.69 J** | 230 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 0.58 U | 280 U | 170 U | 5.8 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 140 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 0.82 U | 400 U | 240 U | 8.2 U | **2.2** | **1.6** | **1.2** | 0.82 U | 0.82 U | 0.82 U | 200 UJ |
| Methylene chloride | | 75-09-2 | 10 | 60 | **0.91** | 340 U | 200 U | **5.4 J** | **0.73** | **1.7** | **1** | **0.8** | **1.2** | **0.84** | 350 U |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 5.8 UJ | 2800 U | 1700 U | 58 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 1400 UJ |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 5.8 UJ | 2800 U | 1700 U | 58 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 1400 UJ |
| Naphthalene | | 91-20-3 | 5.1 | NE | 1 UJ | 510 U | 300 U | 10 U | **0.3 J** | 1 U | **0.56 J** | 1 U | 1 U | 1 U | 260 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.22 J** | 510 U | 300 U | **1.9 J** | **5.3** | **0.4 J** | **2.5** | **0.18 J** | **0.18 J** | 1 U | 260 U |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **0.14 J** | **39 J** | **130 J** | **3.4 J** | **230** | **0.55 J** | **2.5** | **0.2 J** | **0.2 J** | **0.091 J** | 190 U |
| Pentane | | 109-66-0 | NE | NE | **0.99 J** | 580 U | 340 U | 12 U | **1.6** | **1.8** | **21** | **0.68 J** | **0.73 J** | **0.56 J** | 290 U |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **0.7 J** | 960 U | 570 U | **140** | **120** | **21** | **44** | **1.7 J** | **1.9 J** | **0.49 J** | 490 U |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 0.34 U | 170 U | 99 U | **1.2 J*** | **1** | **1.4** | **1.2** | **1.1** | **0.79** | 0.34 U | 85 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 0.55 U | 270 U | 160 U | 5.5 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 140 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **0.31 J** | 260 U | 160 U | 5.4 U | **16** | **0.56** | **19** | **0.25 J** | **0.24 J** | **0.27 J** | 140 U |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1400 UJ |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1400 UJ |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 860 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.56 J** | 300 U | 180 U | 6.1 U | **0.84** | **0.69** | **0.61 J** | **0.58 J** | **0.56 J** | **0.67** | 150 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 0.59 U | 290 U | 170 U | 5.9 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 150 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 0.44 U | **13000 B** | **11000 B** | **340** | **150** | **0.36 JB** | **4 B** | 0.44 U | **0.077 JB** | 0.44 U | **7700** |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 0.44 U | 210 U | 130 U | 4.4 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 110 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 0.19 U | 94 U | 56 U | 1.9 U | 0.19 U | **0.35** | **0.24** | 0.19 U | 0.19 U | 0.19 U | 48 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.5** | 220 U | 130 U | **1.3 J** | **2.3** | **2** | **1.7** | **1.5** | **1.7** | **1.7** | **21 J** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 0.39 U | 190 U | 110 U | **4.9** | **8.6** | **2** | **2.5** | 0.39 U | 0.39 U | 0.39 U | 98 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **0.16 J** | 190 U | 110 U | **3.5 J** | **5.8** | **0.46** | **8.8** | **0.23 J** | **0.2 J** | 0.39 U | 98 U |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 0.39 U | 190 U | 110 U | 3.9 U | **1.5** | 0.39 U | **2.3** | 0.39 U | 0.39 U | 0.39 U | 98 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **0.15 J** | 460 U | 270 U | 9.3 U | **0.53 J** | **0.26 J** | **45** | **0.12 J** | **0.11 J** | **0.12 J** | 230 U |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | 2.6 UJ | 1200 U | 740 U | **6.9 J** | **9.4** | **1.5 J** | **45** | **0.74 J** | **0.76 J** | **0.17 J** | 640 U |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 0.35 U | 170 U | 100 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 87 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.1 U | 50 U | 30 U | 1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 25 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Building | Stores Building (Building C) | | | | | | Building 11 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Matrix | Soil Vapor | | Indoor Air | | | Outdoor Air | Soil Vapor | | | Indoor Air | |
| | | | | | Sample Name | GPEC-SV320 | GPEC-SV-XX-032119 | GPEC-IA319 | GPEC-IA-XX-032119 | GPEC-IA320 | GPEC-OASTORES | GPEC-SV 309 | GPEC-SV XX- 03272018 | GPEC-SV 310 | GPEC-IA 309 | GPEC-IA 310 |
| | | | | | Sample Date | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| | | | | | Parent Sample | | GPEC-SV320 | | GPEC-IA319 | | | | GPEC-SV 309 | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | 81 U | 59 U | **1.1 J** | **1.3** | **2.7** | **0.89** | **1.2 J** | **1.4** | 76 U | **0.94** | **1.7** |
| Toluene | | 108-88-3 | 43 | NE | 140 U | 100 U | **6.6 J** | **10 J** | **11** | **2.4** | **5.4** | **7.1** | 130 U | **4.8** | **6.1** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | 110 U | 80 U | **0.79 J** | **1.3** | **1.4 J** | **0.33 J** | 3.5 U | **1.5** | 100 U | **0.67** | **1.1** |
| o-Xylene | | 95-47-6 | 7.9 | NE | 110 U | 80 U | **0.79 J** | **1.2** | **2** | **0.4** | **1.1 J** | **1.7** | 100 U | **0.53** | **1** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | 110 U | 80 U | **1.8** | **3** | **5.3** | **1.2** | **2.9 J** | **4.6** | 100 U | **1.7** | **3.3** |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | 1500 U | 1100 U | **89** | **100** | **29** | **6.6** | **54** | **76** | 1400 U | **9.5** | **30** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 79 U | 58 U | 1.3 U | 0.25 U | 1.3 U | 0.25 U | 2.5 U | 0.83 U | 75 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 260 U | 190 U | 4.1 U | 0.83 U | 4.1 U | 0.83 U | 8.3 U | 2.8 U | 250 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 170 U | 120 U | 2.7 U | 0.54 U | 2.7 U | 0.54 U | 5.4 U | 1.8 U | 160 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 260 U | 190 U | 4.1 U | 0.83 U | 4.1 U | 0.83 U | 8.3 U | 2.8 U | 250 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 98 U | 72 U | 1.6 U | 0.31 U | 1.6 U | 0.31 U | 3.1 U | 1 U | 92 U | **0.059 J** | **1.2** |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 110 U | 82 U | **0.39 J** | **0.38** | 1.8 U | 0.35 U | 3.5 U | 1.2 U | 110 U | **0.16 J** | 0.35 U |
| Butane | | 106-97-8 | NE | NE | 120 U | 88 U | **8.7** | **8.6** | **64** | **4.3** | **3.6 J** | **3.4** | 110 U | **9.2** | **55** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | 310 U | 220 U | **49** | **54** | **2.6 J** | **0.093 J** | **3.2 J** | **5.6** | 290 U | **0.19 J** | 0.97 U |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | 200 U | 140 U | **0.37 J** | **0.47 J** | **0.34 J** | **0.092 J** | **2 J** | **1.5 J** | 190 U | **0.19 J** | **0.19 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | 64 U | 46 U | 1 U | **0.42** | 1 U | **0.4** | 2 U | **0.94** | 60 U | **0.43** | **0.62** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 120 U | 85 U | 1.8 U | 0.37 U | 1.8 U | 0.37 U | 3.7 U | 1.2 U | 110 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 67 U | 49 U | 1.1 U | **0.16 J** | 1.1 U | 0.21 U | 2.1 U | 0.7 U | 63 U | 0.21 U | 0.21 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | 120 U | 90 U | 2 U | **0.17 J** | 2 U | **0.12 J** | 3.9 U | **0.81 J** | 120 U | **0.11 J** | **0.25 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | 130 U | 95 U | 2.1 U | **2.1** | 2.1 U | **1.5** | **1.3 J** | **0.65 J** | 120 U | **1.4** | **1.5** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 260 U | 190 U | 4.1 U | 0.83 U | 4.1 U | 0.83 U | 8.3 U | 2.8 U | 250 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | 180 U | 130 U | 2.8 U | **0.12 J** | 2.8 U | **0.11 J** | 5.6 U | 1.9 U | 170 U | **0.11 J** | **0.11 J** |
| Cyclohexane | | 110-82-7 | NE | NE | 220 U | 160 U | **1.9 J** | **2** | **2.2 J** | **0.25 J** | 6.9 U | **0.74 J** | 200 U | **0.32 J** | **2** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | 740 U | 540 U | **2.9 J** | **4.8** | **100** | **0.48 J** | **3.4 J** | **3.7 J** | 690 U | **1.4 J** | **1.1 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 220 U | 160 U | 3.4 U | 0.68 U | 3.4 U | 0.68 U | 6.8 U | 2.3 U | 200 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 190 U | 140 U | 3.1 U | 0.61 U | 3.1 U | 0.61 U | 6.1 U | 2 U | 180 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 150 U | 110 U | 2.4 U | 0.48 U | 2.4 U | 0.48 U | 4.8 U | 1.6 U | 140 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 150 U | 110 U | 2.4 U | 0.48 U | 2.4 U | 0.48 U | 4.8 U | 1.6 U | 140 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 150 U | 110 U | 2.4 U | 0.48 U | 2.4 U | 0.48 U | 4.8 U | 1.6 U | 140 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | 130 U | 91 U | **2.6** | **2.7** | **2.6** | **2.7** | **2.8 J** | **3.4** | 120 U | **2.6** | **3** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 100 U | 75 U | 1.6 U | 0.32 U | 1.6 U | 0.32 U | **1.6 J** | **1.7** | **860** | **0.098 J** | **0.29 J** |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 100 U | 75 U | 1.6 U | **0.1 J** | 1.6 U | **0.08 J** | 3.2 U | 1.1 U | 96 U | **0.091 J** | **0.2 J** |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 50 U | 37 U | 0.79 U | 0.16 U | 0.79 U | 0.16 U | 1.6 U | 0.53 U | **220** | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 50 U | 37 U | 0.79 U | 0.16 U | 0.79 U | 0.16 U | 1.6 U | 0.53 U | 47 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 100 U | 73 U | 1.6 U | 0.32 U | 1.6 U | 0.32 U | 3.2 U | 1.1 U | 94 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 120 U | 85 U | 1.8 U | 0.37 U | 1.8 U | 0.37 U | 3.7 U | 1.2 U | 110 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 120 U | 84 U | 1.8 U | 0.36 U | 1.8 U | 0.36 U | 3.6 U | 1.2 U | 110 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 120 U | 84 U | 1.8 U | 0.36 U | 1.8 U | 0.36 U | 3.6 U | 1.2 U | 110 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 230 U | 170 U | 3.6 U | **0.54 J** | 3.6 U | 0.72 U | 7.2 U | 2.4 U | 210 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 880 U | 640 U | **5 J** | **10** | **15** | **0.35 J** | 28 U | **1.1 J** | 830 U | **0.38 J** | **1 J** |
| Ethanol | | 64-17-5 | 210 | NE | 1200 U | 870 U | **130** | **140** | **210** | **11** | **390** | **440** | **910 J** | **13** | **49** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 250 U | 180 U | 3.9 U | **0.39 J** | **1.1 J** | **0.15 J** | 7.9 U | 2.6 U | 230 U | **0.24 J** | **0.36 J** |
| n-Heptane (C7) | | 142-82-5 | NE | NE | 260 U | 190 U | **7** | **7.6** | **3.1 J** | **0.43 J** | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Stores Building (Building C) | | | | | | Building 11 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Soil Vapor | | Indoor Air | | | Outdoor Air | Soil Vapor | | | Indoor Air | |
| Sample Name | | | | | GPEC-SV320 | GPEC-SV-XX-032119 | GPEC-IA319 | GPEC-IA-XX-032119 | GPEC-IA320 | GPEC-OASTORES | GPEC-SV 309 | GPEC-SV XX- 03272018 | GPEC-SV 310 | GPEC-IA 309 | GPEC-IA 310 |
| Sample Date | | | | | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| Parent Sample | | | | | | GPEC-SV320 | | GPEC-IA319 | | | | GPEC-SV 309 | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | NA | NA | NA | NA | NA | NA | **2.2 J** | **2.7 J** | 240 U | **0.46 J** | **1.3** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 270 UJ | 200 U | 4.3 UJ | 0.85 U | 4.3 UJ | 0.85 UJ | 8.5 U | 2.8 U | 250 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | 220 U | 160 U | **2.4 J** | **2.2** | **6.5** | **0.6 J** | **1.7 J** | **1.9 J** | 210 U | **1.1** | **5.9** |
| 2-Hexanone | | 591-78-6 | NE | NE | 260 UJ | 190 U | 4.1 UJ | **0.2 J** | 4.1 UJ | 0.82 UJ | 8.2 U | **0.39 J** | 240 U | 0.82 U | **0.15 J** |
| Indane | | 496-11-7 | NE | NE | 1500 U | 1100 U | 24 U | 4.8 U | 24 U | 4.8 U | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | 1500 U | 1100 U | 24 U | 4.8 U | 24 U | 4.8 U | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | 300 U | 220 U | **3.4 J** | **3** | **17** | **0.78 J** | **16** | **25** | 280 U | **0.96** | **2** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 180 U | 130 U | 2.9 U | 0.58 U | 2.9 U | 0.58 U | 5.8 U | 1.9 U | 170 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 260 UJ | 190 U | **2.2 J** | **3.2** | 4.1 UJ | 0.82 UJ | 8.2 U | **1.2 J** | 240 U | 0.82 U | **0.44 J** |
| Methylene chloride | | 75-09-2 | 10 | 60 | 440 U | 320 U | **3.1 J** | **1.6 J** | **2.9 J** | **1.3 J** | **5 J** | **2.4** | 210 U | **1.5** | **0.88** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 1800 UJ | 1300 U | 29 UJ | 5.8 U | 29 UJ | 5.8 UJ | 58 U* | 19 U* | 1700 U* | 5.8 U* | 5.8 U* |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 1800 UJ | 1300 U | 29 UJ | 5.8 U | 29 UJ | 5.8 UJ | 58 U* | 19 U* | 1700 U* | 5.8 U* | 5.8 U* |
| Naphthalene | | 91-20-3 | 5.1 | NE | 330 U | 240 U | 5.2 U | **0.31 J** | 5.2 U | 1 U | 10 U | 3.5 U | 310 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | 330 U | 240 U | **0.76 J** | **1.2** | **1.2 J** | **0.27 J** | 10 U | **1 J** | 310 U | **0.79 J** | **0.44 J** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | 240 U | 170 U | **1.6 J** | **2.1** | **1.1 J** | **0.22 J** | **2.4 J** | **2.5** | **29 J** | **0.42 J** | **0.47 J** |
| Pentane | | 109-66-0 | NE | NE | 370 U | 270 U | **3.2 J** | **3** | **19** | **1.2** | 12 U | 3.9 U | 350 U | **3.2** | **21** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | 620 U | 450 U | **130** | **140** | **120** | **2.7** | **11 J*** | **12** | 590 U* | **2.3** * | **9.7** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 110 U | 79 U | **1.3 J** | **2.7** | **0.61 J** | **0.13 J** | 3.4 U | 1.1 U | 100 U | 0.34 U | **0.27 J** |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 170 U | 130 U | 2.7 U | 0.55 U | 2.7 U | 0.55 U | 5.5 U | 1.8 U | 160 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | 170 U | 130 U | **2 J** | **1.5** | **4.1** | **0.97** | 5.4 U | **0.92 J** | 160 U | **1.1** | **0.86** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | 1700 UJ | 1300 UJ | 27 UJ | 5.5 UJ | 27 UJ | 5.5 UJ | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | 1700 UJ | 1300 UJ | 27 UJ | 5.5 UJ | 27 UJ | 5.5 UJ | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | 1100 U | 790 U | 17 U | 3.4 U | 17 U | 3.4 U | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | 190 U | 140 U | 3.1 U | **0.49 J** | 3.1 U | **0.48 J** | **1.1 J** | **1.3 J** | 180 U | **0.53 J** | **0.57 J** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 190 U | 140 U | 3 U | 0.59 U | 3 U | 0.59 U | 5.9 U | 2 U | 180 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | **8800** | **7500** | 2.2 U | **0.3 J** | **2.2** | 0.44 U | **120** | **140** | **7800** | **0.86** | **4.1** |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 140 U | 100 U | 2.2 U | 0.44 U | 2.2 U | 0.44 U | 4.4 U | 1.5 U | 130 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 61 U | 45 U | 0.97 U | **0.3** | 0.97 U | 0.19 U | 1.9 U | 0.64 U | **1300** | **0.15 J** | **1.2** |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **52 J** | **17 J** | **1.9 J** | **1.3** | **1.8 J** | **1.3** | **1.9 J** | **2.3** | 130 U | **1.4** | **1.6** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 120 U | 91 U | 2 U | 0.39 U | **2.2** | 0.39 U | 3.9 U | **1.1 J** | 120 U | **0.19 J** | **0.21 J** |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | 120 U | 91 U | **0.62 J** | **1** | **3.6** | **0.36 J** | 3.9 U | **1.8** | 120 U | **0.62** | **0.69** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 120 U | 91 U | 2 U | **0.34 J** | **0.94 J** | 0.39 U | 3.9 U | **0.45 J** | 120 U | **0.2 J** | **0.18 J** |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **36 J** | **48 J** | **2.7 J** | **2.7** | **380** | **0.54 J** | **0.9 J** | **1 J** | 280 U | **0.47 J** | **1** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | 810 U | 590 U | **32 J** | **52 J** | **42** | **0.34 J** | 26 U | **2 J** | 760 U | **0.87 J** | **0.9 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 110 U | 81 U | 1.7 U | 0.35 U | 1.7 U | 0.35 U | 3.5 U | 1.2 U | 100 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 32 U | 24 U | 0.51 U | 0.1 U | 0.51 U | 0.1 U | 1 U | 0.34 U | 30 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Building | Building 11 | | | | Gatehouse (Building A) | | | | | | LNG Guard House |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Matrix | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor |
| | | | | | Sample Name | GPEC-OA BLDG 11 | GPEC-SV310 | GPEC-IA310 | GPEC-OABLDG11 | GPEC-SV 327 | GPEC-IA 327 | GPEC-OA GATEHOUSE | GPEC-SV327 | GPEC-IA327 | GPEC-OAGATEHOUSE | GPEC-SV330 |
| | | | | | Sample Date | 3/27/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/18/2018 |
| | | | | | Parent Sample | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS No.** | **EPA BASE Indoor Air Concentrations 90th Percentile Range[1]** | **NYSDOH Air Guideline Values** | | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **0.86** | 77 U | **2.4** | **0.79** | **1.4** | 12 U | **0.7** | **0.83** | **0.83 J** | **0.9** | **1.2** |
| Toluene | | 108-88-3 | 43 | NE | **1.6** | 140 U | **6.5** | **2.1** | **1.8** | 21 U | **1.6** | **1.9** | 2.3 U | **2.4** | **6.6** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **0.25 J** | 110 U | **0.66** | **0.2 J** | 1.2 U | 16 U | **0.25 J** | **0.3 J** | 1.7 U | **0.32 J** | **1** |
| o-Xylene | | 95-47-6 | 7.9 | NE | **0.31 J** | 110 U | **0.66** | **0.25 J** | **0.41 J** | 16 U | **0.3 J** | **0.35** | 1.7 U | **0.41** | **1.4** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **0.91** | 110 U | **2.2** | **0.67** | **1.2** | 16 U | **0.87** | **0.99** | 1.7 U | **1.2** | **3.6** |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **6** | 1400 U | **28** | **14 J** | **90** | 220 U | **6.5** | **44 J** | **14 J** | **11 J** | **200** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.25 U | 76 U | 0.25 U | 0.25 U | 0.83 U | 11 U | 0.25 U | 0.25 U | 1.3 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 0.83 U | 250 U | 0.83 U | 0.83 U | 2.8 U | 38 U | 0.83 U | 0.83 U | 4.1 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 0.54 U | 160 U | 0.54 U | 0.54 U | 1.8 U | 24 U | 0.54 U | 0.54 U | 2.7 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 0.83 U | 250 U | 0.83 U | 0.83 U | 2.8 U | 38 U | 0.83 U | 0.83 U | 4.1 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 0.31 U | 94 U | **0.88** | **0.2 J** | 1 U | 14 U | 0.31 U | 0.31 U | 1.6 U | 0.31 U | **0.059 J** |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 0.35 U | 110 U | 0.35 U | 0.35 U | **0.21 J** | 16 U | 0.35 U | 0.35 U | 1.8 U | 0.35 U | **0.28 J** |
| Butane | | 106-97-8 | NE | NE | **3** | 120 U | **8.1** | **4.1** | **3.6** | **150** | **3.4** | **1.5** | **20** | **4.2** | **1.7** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | 0.97 U | 290 U | **0.17 J** | **0.31 J** | **8.8** | 44 U | 0.97 U | **1.7** | **4.8** | **0.081 J** | **46** |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **0.12 J** | 190 U | **0.15 J** | **0.1 J** | **2.4** | 28 U | **0.064 J** | **0.29 J** | 3.1 U | **0.11 J** | **1.1** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.72** | 61 U | **0.5** | **0.49** | **0.45 J** | 9.2 U | **0.44** | **0.27** | 1 U | **0.41** | **0.38** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 0.37 U | 110 U | 0.37 U | 0.37 U | 1.2 U | 17 U | 0.37 U | 0.37 U | 1.8 U | 0.37 U | **0.26 J** |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.21 U | 64 U | 0.21 U | 0.21 U | 0.7 U | 9.6 U | 0.21 U | **0.043 J** | 1.1 U | 0.21 U | **0.16 J** |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **0.15 J** | **22 J** | **0.17 J** | **0.11 J** | **0.31 J** | 18 U | **0.12 J** | **0.24 J** | 2 U | **0.1 J** | **1.8** |
| Chloromethane | | 74-87-3 | 3.7 | NE | **1.4** | 130 U | **1.6** | **1.5** | **1.3 J** | 19 U | **1.4** | 0.44 U | **2 J** | **1.5** | **2.2** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 0.83 U | 250 U | 0.83 U | 0.83 U | 2.8 U | 38 U | 0.83 U | 0.83 U | 4.1 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | **0.15 J** | 170 U | 0.56 U | 0.56 U | 1.9 U | 25 U | **0.11 J** | **0.11 J** | 2.8 U | **0.13 J** | **0.12 J** |
| Cyclohexane | | 110-82-7 | NE | NE | **0.2 J** | 210 U | **0.79** | **0.19 J** | **0.41 J** | 31 U | **0.16 J** | **0.24 J** | **0.35 J** | **0.25 J** | **0.65 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **0.42 J** | 700 U | **1.3 J** | **0.22 J** | **2 J** | 110 U | **0.57 J** | **2 J** | **1.1 J** | **0.47 J** | **3.7** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 0.68 U | 210 U | 0.68 U | 0.68 U | 2.3 U | 31 U | 0.68 U | 0.68 U | 3.4 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 0.61 U | 190 U | 0.61 U | 0.61 U | 2 U | 28 U | 0.61 U | 0.61 U | 3.1 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 0.48 U | 150 U | 0.48 U | 0.48 U | 1.6 U | 22 U | 0.48 U | 0.48 U | 2.4 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 0.48 U | 150 U | 0.48 U | 0.48 U | **4.1** | 22 U | 0.48 U | **0.25 J** | 2.4 U | 0.48 U | **9.6** |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 0.48 U | 150 U | 0.48 U | 0.48 U | 1.6 U | 22 U | 0.48 U | 0.48 U | 2.4 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **3.4** | 120 U | **3.2** | **2.9** | **2.9** | 18 U | **2.7** | **2.6** | **2.5** | **2.6** | **2.5** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 0.32 U | **580** | **0.28 J** | 0.32 U | 1.1 U | 15 U | 0.32 U | **0.066 J** | 1.6 U | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | **0.19 J** | 98 U | **0.12 J** | **0.089 J** | 1.1 U | 15 U | **0.083 J** | 0.32 U | 1.6 U | 0.32 U | **0.081 J** |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.16 U | **180** | 0.16 U | 0.16 U | 0.53 U | 7.2 U | 0.16 U | 0.16 U | 0.79 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.16 U | 48 U | 0.16 U | 0.16 U | 0.53 U | 7.2 U | 0.16 U | 0.16 U | 0.79 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 0.32 U | 96 U | 0.32 U | 0.32 U | 1.1 U | 14 U | 0.32 U | 0.32 U | 1.6 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 0.37 U | 110 U | 0.37 U | 0.37 U | **2.1** | 17 U | 0.37 U | 0.37 U | 1.8 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 0.36 U | 110 U | 0.36 U | 0.36 U | 1.2 U | 17 U | 0.36 U | 0.36 U | 1.8 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 0.36 U | 110 U | 0.36 U | 0.36 U | 1.2 U | 17 U | 0.36 U | 0.36 U | 1.8 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 0.72 U | 220 U | 0.72 U | 0.72 U | 2.4 U | 33 U | 0.72 U | 0.72 U | 3.6 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 2.8 U | 840 U | **1.3 J** | 2.8 U | 9.3 U | 130 U | 2.8 U | **1.2 J** | **5.2 J** | 2.8 U | **1.7 J** |
| Ethanol | | 64-17-5 | 210 | NE | **9.4** | 1100 U | **42** | **16** | **240** | **2600** | **16** | **200** | **3600** | **12** | **610** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | **0.15 J** | 240 U | **0.27 J** | 0.79 U | 2.6 U | 36 U | 0.79 U | 0.79 U | 3.9 U | **0.13 J** | **0.42 J** |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | 250 U | **0.95** | **0.35 J** | NA | NA | NA | **0.55 J** | **0.5 J** | **0.51 J** | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Building | Building 11 | | | Gatehouse (Building A) | | | | | | LNG Guard House |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Matrix | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor |
| | | | | | Sample Name | GPEC-OA BLDG 11 | GPEC-SV310 | GPEC-IA310 | GPEC-OABLDG11 | GPEC-SV 327 | GPEC-IA 327 | GPEC-OA GATEHOUSE | GPEC-SV327 | GPEC-IA327 | GPEC-OAGATEHOUSE | GPEC-SV330 |
| | | | | | Sample Date | 3/27/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 3/18/2018 |
| | | | | | Parent Sample | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **0.35 J** | NA | NA | NA | **0.44 J** | 37 U | **0.31 J** | NA | NA | NA | **0.88** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 0.85 U | 260 UJ | 0.85 U | 0.85 U | 2.8 U | 39 U | 0.85 U | 0.85 UJ | 4.3 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **0.5 J** | 210 U | **2.2** | **0.6 J** | **0.68 J** | **7.2 J** | **0.47 J** | **0.68 J** | **0.83 J** | **0.57 J** | **1.3** |
| 2-Hexanone | | 591-78-6 | NE | NE | 0.82 U | 250 UJ | 0.82 U | 0.82 U | 2.7 U | 37 U | 0.82 U | **0.28 J** | 4.1 U | **0.12 J** | **0.4 J** |
| Indane | | 496-11-7 | NE | NE | NA | 1500 U | 4.8 U | 4.8 U | NA | NA | NA | 4.8 U | 24 U | 4.8 U | NA |
| Indene | | 95-13-6 | NE | NE | NA | 1400 U | 4.8 U | 4.8 U | NA | NA | NA | 4.8 U | 24 U | 4.8 U | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **0.89 J** | 290 U | **1.6** | **1.2** | **9.9** | 43 U | **0.67 J** | **3.7** | 4.7 U | **1.2** | **48** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 0.58 U | 170 U | 0.58 U | 0.58 U | 1.9 U | 26 U | 0.58 U | 0.58 U | 2.9 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 0.82 U | 250 UJ | **0.43 J** | **0.49 J** | 2.7 U | 37 U | 0.82 U | **0.77 J** | 4.1 U | **0.35 J** | **1.4** |
| Methylene chloride | | 75-09-2 | 10 | 60 | **1** | 420 U | **2.4** | **1.9** | **2 J** | **21 J** | **1.1** | **3.5 J** | **2.8 J** | **1.2 J** | **0.97** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 5.8 U* | 1800 UJ | 5.8 UJ | 5.8 UJ | 19 U* | 260 U* | 5.8 U* | 5.8 UJ | 29 U | 5.8 U | 5.8 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 5.8 U* | 1800 UJ | 5.8 UJ | 5.8 UJ | 19 U* | 260 U* | 5.8 U* | 5.8 UJ | 29 U | 5.8 U | 5.8 U |
| Naphthalene | | 91-20-3 | 5.1 | NE | 1 U | 320 U | 1 U | 1 U | 3.5 U | 48 U | 1 U | 1 U | 5.2 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.32 J** | 320 U | **0.64 J** | **0.27 J** | 3.5 U | 48 U | **0.35 J** | **0.28 J** | 5.2 U | **0.28 J** | **1.1** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **0.16 J** | 230 U | **0.36 J** | **0.16 J** | **1.5 J** | 34 U | **0.16 J** | **0.4 J** | 3.7 U | **0.22 J** | **1.6** |
| Pentane | | 109-66-0 | NE | NE | **1.2 J** | 360 U | **3.9** | **1.3** | 3.9 U | 54 U | **1.1 J** | **0.64 J** | 5.9 U | **1.2** | **1.3** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **1.4 J** | 600 U | **4.1** | **3** | **9.6** | **17000** | **13 *** | **2.6** | **490** | **2.1** | **120** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 0.34 U | 100 U | **0.16 J** | 0.34 U | 1.1 U | 15 U | 0.34 U | **0.11 J** | 1.7 U | 0.34 U | **0.15 J** |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 0.55 U | 170 U | 0.55 U | 0.55 U | 1.8 U | 25 U | 0.55 U | 0.55 U | 2.7 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **0.62** | **63 J** | **1.3** | **0.65** | **0.92 J** | 25 U | **1.2** | **1.3** | **0.81 J** | **0.5 J** | **0.52 J** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | 1700 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | 5.5 UJ | 27 UJ | 5.5 UJ | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | 1700 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | 5.5 UJ | 27 UJ | 5.5 UJ | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | 1000 U | 3.4 U | 3.4 U | NA | NA | NA | 3.4 U | 17 U | 3.4 U | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.63** | 190 U | **0.62** | **0.6 J** | **0.46 J** | 28 U | **0.54 J** | **0.45 J** | **0.49 J** | **0.48 J** | **0.55 J** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 0.59 U | 180 U | 0.59 U | 0.59 U | 2 U | 27 U | 0.59 U | 0.59 U | 3 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 0.44 U | **6400** | **3.4** | **0.08 J** | **2.1** | 20 U | 0.44 U | **8.6** | 2.2 U | 0.44 U | **0.27 J** |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 0.44 U | 130 U | 0.44 U | 0.44 U | 1.5 U | 20 U | 0.44 U | 0.44 U | 2.2 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 0.19 U | **1700** | **0.97** | 0.19 U | 0.64 U | 8.8 U | 0.19 U | **1** | **1.1** | 0.19 U | 0.19 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.9** | 140 U | **2.3** | **1.9** | **1.6** | 20 U | **1.4** | **1.3** | **1.5 J** | **1.3** | **1.4** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 0.39 U | 120 U | **0.33 J** | 0.39 U | **0.88 J** | 18 U | 0.39 U | 0.39 U | 2 U | 0.39 U | **0.46 *** |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **0.34 J** | 120 U | **0.59** | **0.15 J** | **0.62 J** | 18 U | **0.29 J** | **0.32 J** | 2 U | **0.37 J** | **1.8** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 0.39 U | 120 U | **0.18 J** | 0.39 U | 1.3 U | 18 U | 0.39 U | 0.39 U | 2 U | 0.39 U | **0.43** |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **0.39 J** | 280 U | **1.4** | **0.35 J** | **0.41 J** | 42 U | **0.35 J** | **2.2** | **0.52 J** | **0.52 J** | **1.5** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **0.34 J** | 770 U | **0.82 J** | 2.6 U | **0.66 J** | 120 U | **0.29 J** | **0.42 J** | **20** | **0.28 J** | **2.3 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 0.35 U | 110 U | 0.35 U | 0.35 U | 1.2 U | 16 U | 0.35 U | 0.35 U | 1.7 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.1 U | 31 U | 0.1 U | 0.1 U | 0.34 U | 4.6 U | 0.1 U | 0.1 U | 0.51 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | LNG Guard House | | | | | LNG North Storage Building | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air |
| Sample Name | | | | | GPEC-IA330 | GPEC-OALNGGUARD | GPEC-SV330 | GPEC-IA330 | GPEC-OALNGGUARD | GPEC-SV328 | GPEC-IA328 | GPEC-OANSTORAGE | GPEC-SV328 | GPEC-IA328 | GPEC-OANSTORAGE |
| Sample Date | | | | | 3/18/2018 | 3/18/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 |
| Parent Sample | | | | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS No.** | **EPA BASE Indoor Air Concentrations 90th Percentile Range[1]** | **NYSDOH Air Guideline Values** | | | | | | | | | | | |
| **BTEX** | µg/m$^3$ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | 47 U | **0.42** | **1.9** | **0.69** | **0.75** | 6.4 U | **0.79** | **0.37** | 6.4 U | **3.3** | **0.85** |
| Toluene | | 108-88-3 | 43 | NE | 83 U | **0.66** | **2.8** | **2.3** | **1.9** | 11 U | **1.6** | **0.54** | 11 U | **11** | **2** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | 64 U | 0.35 U | **0.41** | **0.31 J** | **0.25 J** | 8.7 U | **0.23 J** | 0.35 U | 8.7 U | **1.5** | **0.27 J** |
| o-Xylene | | 95-47-6 | 7.9 | NE | 64 U | **0.12 J** | **0.47** | **0.35** | **0.29 J** | 8.7 U | **0.28 J** | **0.12 J** | 8.7 U | **1.7** | **0.29 J** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | 64 U | **0.37** | **1.3** | **0.95** | **0.79** | 8.7 U | **0.76** | **0.34 J** | 8.7 U | **4.9** | **0.82** |
| **Other VOCs** | µg/m$^3$ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | 880 U | **4.3 J** | **110 J** | **45 J** | **19 J** | **48 J** | **4.6 J** | **14** | 120 U | **19** | **11** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 46 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 6.3 U | 0.25 U | 0.25 U | 6.3 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 150 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 99 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 13 U | 0.54 U | 0.54 U | 13 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 150 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 57 U | 0.31 U | **0.11 J** | **0.063 J** | **0.22 J** | 7.8 U | 0.31 U | 0.31 U | 7.8 U | **0.25 J** | **0.38** |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 65 U | 0.35 U | **0.12 J** | 0.35 U | 0.35 U | 8.8 U | 0.35 U | 0.35 U | 8.8 U | 0.35 U | 0.35 U |
| Butane | | 106-97-8 | NE | NE | **61 J** | **2.5** | **1.8** | **44** | **3.8** | **4.5 J** | **38** | **3** | 9.5 U | **43** | **4.9** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | 180 U | 0.97 U | **16** | **3.7** | **0.12 J** | **20 J** | 0.97 U | **0.18 J** | 24 U | **0.17 J** | **0.069 J** |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | 110 U | 0.62 U | **0.3 J** | **0.21 J** | **0.052 J** | 16 U | **0.09 J** | **0.18 J** | **1.2 J** | **0.13 J** | **0.11 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | 37 U | **0.56** | **0.35** | **0.51** | **0.36** | **6** | **0.34** | **0.43** | **4.7 J** | **0.48** | **0.52** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 68 U | 0.37 U | **0.35 J** | 0.37 U | 0.37 U | 9.2 U | 0.37 U | 0.37 U | 9.2 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 39 U | 0.21 U | **0.15 J** | 0.21 U | **0.065 J** | 5.3 U | 0.21 U | 0.21 U | 5.3 U | 0.21 U | **0.072 J** |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | 72 U | **0.13 J** | **0.24 J** | **0.13 J** | **0.098 J** | 9.8 U | **0.11 J** | **0.1 J** | 9.8 U | **0.14 J** | **0.14 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | 76 U | **1.3** | **2.1** | **1.5** | **1.5** | 10 U | **1.5** | **1.2** | 10 U | **1.5** | **1.8** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 150 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U | 21 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | 100 U | **0.14 J** | **0.12 J** | 0.56 U | **0.1 J** | 14 U | **0.11 J** | **0.11 J** | 14 U | 0.56 U | 0.56 U |
| Cyclohexane | | 110-82-7 | NE | NE | 130 U | **0.085 J** | **0.39 J** | **0.22 J** | **0.19 J** | 17 U | **0.61 J** | **0.14 J** | 17 U | **1.9** | **0.21 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | 430 U | **0.37 J** | **1.7 J** | **1.3 J** | **0.6 J** | **4.5 J** | **6.1** | **0.26 J** | 58 U | **0.65 J** | **0.67 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 130 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 17 U | 0.68 U | 0.68 U | 17 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 110 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 15 U | 0.61 U | 0.61 U | 15 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 89 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 89 U | 0.48 U | **6.9** | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 89 U | 0.48 U | **0.21 J** | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U | 12 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | 73 U | **3.3** | **1.7** | **2.7** | **2.5** | 9.9 U | **2.7** | **2.5** | 9.9 U | **3.1** | **3.4** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 60 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 8.1 U | 0.32 U | 0.32 U | 8.1 U | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 60 U | 0.32 U | **0.1 J** | **0.089 J** | **0.08 J** | 8.1 U | 0.32 U | 0.32 U | 8.1 U | **0.094 J** | **0.09 J** |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 29 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 4 U | 0.16 U | 0.16 U | 4 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 29 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 4 U | 0.16 U | **0.55** | 4 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 59 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 7.9 U | 0.32 U | 0.32 U | 7.9 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 68 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 9.2 U | 0.37 U | 0.37 U | 9.2 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 67 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 9.1 U | 0.36 U | 0.36 U | 9.1 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 67 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 9.1 U | 0.36 U | 0.36 U | 9.1 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 130 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 18 U | 0.72 U | 0.72 U | 18 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 510 U | 2.8 U | **1.2 J** | **0.94 J** | 2.8 U | 70 U | **0.36 J** | 2.8 U | 70 U | 2.8 U | 2.8 U |
| Ethanol | | 64-17-5 | 210 | NE | **12000** | **23** | **320** | **2800** | **17** | **210** | **13** | **7.2** | 94 U | **58** | **19** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 150 U | 0.79 U | **0.16 J** | 0.79 U | **0.14 J** | 20 U | 0.79 U | 0.79 U | 20 U | **0.61 J** | 0.79 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | **0.75 J** | **0.42 J** | **0.37 J** | NA | NA | NA | 20 U | **2.1** | **0.32 J** |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | LNG Guard House | | | | | LNG North Storage Building | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air |
| Sample Name | | | | | GPEC-IA330 | GPEC-OALNGGUARD | GPEC-SV330 | GPEC-IA330 | GPEC-OALNGGUARD | GPEC-SV328 | GPEC-IA328 | GPEC-OANSTORAGE | GPEC-SV328 | GPEC-IA328 | GPEC-OANSTORAGE |
| Sample Date | | | | | 3/18/2018 | 3/18/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/20/2019 | 3/20/2019 | 3/20/2019 |
| Parent Sample | | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | 150 U | **0.15 J** | NA | NA | NA | 20 U | **0.54 J** | **0.2 J** | NA | NA | NA |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 160 U | 0.85 U | 0.85 UJ | 0.85 U | 0.85 UJ | 21 U | 0.85 U | 0.85 U | 21 UJ | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | 130 U | **0.42 J** | **1** | **0.61 J** | **0.52 J** | **1.2 J** | **2.5** | **0.41 J** | **2.2 J** | **5.8** | **0.72** |
| 2-Hexanone | | 591-78-6 | NE | NE | 150 U | 0.82 U | 0.82 UJ | **0.34 J** | 0.82 UJ | 20 U | 0.82 U | **0.26 J** | 20 UJ | 0.82 U | 0.82 U |
| Indane | | 496-11-7 | NE | NE | NA | NA | 4.8 U | 4.8 U | 4.8 U | NA | NA | NA | 120 U | 4.8 U | 4.8 U |
| Indene | | 95-13-6 | NE | NE | NA | NA | 4.8 U | 4.8 U | 4.8 U | NA | NA | NA | 120 U | 4.8 U | 4.8 U |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | 170 U | **0.5 J** | **15** | **2.6** | **1.3** | **18 J** | **0.57 J** | **1.8** | 24 U | **2.1** | **1.1** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 110 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 14 U | 0.58 U | 0.58 U | 14 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 150 U | 0.82 U | **0.64 J** | **3.4** | **0.35 J** | 20 U | 0.82 U | 0.82 U | 20 UJ | **0.56 J** | 0.82 U |
| Methylene chloride | | 75-09-2 | 10 | 60 | **110 J** | **3.6** | **1.1 J** | **1.8** | **1.4 J** | **15 J** | **3.6** | **2.6** | 35 U | **2** | **2.2** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 1100 U | 5.8 U | 5.8 UJ | 5.8 UJ | 5.8 UJ | 150 U | 5.8 U | 5.8 U | 150 UJ | 5.8 UJ | 5.8 UJ |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 1100 U | 5.8 U | 5.8 UJ | 5.8 UJ | 5.8 UJ | 150 U | 5.8 U | 5.8 U | 150 UJ | 5.8 UJ | 5.8 UJ |
| Naphthalene | | 91-20-3 | 5.1 | NE | 190 U | 1 U | 1 U | 1 U | 1 U | 26 U | 1 U | 1 U | 26 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | 190 U | **0.13 J** | **0.53 J** | **0.52 J** | **0.39 J** | 26 U | **0.39 J** | **0.14 J** | 26 U | **0.79 J** | **0.34 J** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | 140 U | 0.75 U | **0.95** | **0.22 J** | **0.22 J** | 19 U | **0.24 J** | **0.14 J** | 19 U | **0.91** | **0.18 J** |
| Pentane | | 109-66-0 | NE | NE | 220 U | **0.8 J** | **1.2** | **2.9** | **1 J** | 30 U | **9.8** | **0.87 J** | 30 U | **22** | **1.6** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | 360 U | **0.9 J** | **6.6** | **270** | **1.9 J** | **70** | **2.1** | **0.87 J** | 49 U | **4** | **2.9** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 63 U* | 0.34 U* | **0.11 J** | **0.92** | 0.34 U | 8.5 U* | 0.34 U | 0.34 U | 8.5 U | **0.18 J** | 0.34 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 100 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 14 U | 0.55 U | 0.55 U | 14 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | 100 U | **0.32 J** | **0.62** | **0.75** | **0.74** | 14 U | **0.24 J** | **0.22 J** | 14 U | **0.54 J** | **0.95** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | 5.5 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | 140 UJ | 5.5 UJ | 5.5 UJ |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | 5.5 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | 140 UJ | 5.5 UJ | 5.5 UJ |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | 3.4 U | 3.4 U | 3.4 U | NA | NA | NA | 86 U | 3.4 U | 3.4 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | 110 U | **0.98** | **0.55 J** | **0.63** | **0.47 J** | **42** | **0.55 J** | **0.53 J** | **70** | **0.6 J** | **0.66** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 110 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 15 U | 0.59 U | 0.59 U | 15 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 81 U | **0.15 J** | **0.15 J** | 0.44 U | 0.44 U | **720** | **0.086 J** | 0.44 U | **780** | 0.44 U | 0.44 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 81 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 11 U | 0.44 U | 0.44 U | 11 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 36 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 4.8 U | 0.19 U | 0.19 U | 4.8 U | 0.19 U | 0.19 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | 83 U | **3.9** | **1.4** | **2.1** | **1.2** | **590** | **1.5** | **1.3** | **410** | **2.2** | **2.3** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 73 U | 0.39 U | 0.39 U | 28 U | 0.39 U | 9.8 U | 0.39 U | 0.39 U | 9.8 U | **0.33 J** | 0.39 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | 73 U | 0.39 U | **0.44** | **0.37 J** | **0.33 J** | 9.8 U | **0.23 J** | 0.39 U | 9.8 U | **1.4** | **0.29 J** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 73 U | 0.39 U | **0.14 J** | 0.39 U | 0.39 U | 9.8 U | 0.39 U | 0.39 U | 9.8 U | **0.53** | 0.39 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | 170 U | **0.14 J** | **0.43 J** | **0.31 J** | **0.36 J** | 23 U | **0.57 J** | **0.15 J** | 23 U | **2.5** | **0.39 J** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | 470 U | 2.6 U | **0.28 J** | **4.2** | **0.33 J** | 64 U | 2.6 U | 2.6 U | 64 U | 2.6 U | **0.26 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 65 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 8.7 U | 0.35 U | 0.35 U | 8.7 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 19 U | 0.1 U | **0.14** | 0.1 U | 0.1 U | 2.6 U | 0.1 U | 0.1 U | 2.6 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Facilities Building (Building 21) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Building | | | | | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Soil Vapor | Indoor Air | | | |
| Matrix | | | | | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Soil Vapor | Indoor Air | | | |
| Sample Name | | | | | GPEC-SV 306 | GPEC-IA 306 | GPEC-OA FACILITIES | GPEC-SV306 | GPEC-IA306 | GPEC-OAFACILITIES | GPEC-SV-306 | GPEC-SV-306 | GPEC-IA-306 | GPEC-IA-306 | GPEC-IA-FACILITIES 2ND |
| Sample Date | | | | | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 6/10/2019 | 6/11/2019 | 6/10/2019 | 6/11/2019 | 6/10/2019 |
| Parent Sample | | | | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS No.** | **EPA BASE Indoor Air Concentrations 90th Percentile Range[1]** | **NYSDOH Air Guideline Values** | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **1.3** | **0.83** | **0.87** | **1.1 J** | **1** | **1** | 1 U | **0.7** | 1 U | **0.48** | 1 U |
| Toluene | | 108-88-3 | 43 | NE | **5.4** | **3.7** | **3.1** | 4.5 U | **5.6** | **2.9** | **2.68** | **4.5** | **1.94** | **3** | **1.94** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **1.2** | **0.44** | **0.38** | 3.5 U | **0.49** | **0.4** | 1 U | **0.77** | 1 U | **0.45** | 1 U |
| o-Xylene | | 95-47-6 | 7.9 | NE | **1.3** | **0.56** | **0.47** | 3.5 U | **0.65** | **0.46** | 1 U | **0.8** | 1 U | **0.56** | 1 U |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **3.7** | **1.6** | **1.3** | 3.5 U | **1.8** | **1.4** | **1.44** | **2.3** | **1.28** | **1.7** | **1.37** |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **59** | **12** | **7.9** | **68 J** | **29** | **12** | **9.71** | **16** | **11.5** | **18** | **11.9** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.83 U | 0.25 U | 0.25 U | 2.5 U | 0.25 U | 0.25 U | NA | 0.25 U | NA | 0.25 U | NA |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 2.8 U | 0.83 U | 0.83 U | 8.3 U | 0.83 U | 0.83 U | 1 U | 0.83 U | 1 U | 0.83 U | 1 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 1.8 U | 0.54 U | 0.54 U | 5.4 U | 0.54 U | 0.54 U | 1 U | 0.54 U | 1 U | 0.54 U | 1 U |
| Bromoform | | 75-25-2 | NE | NE | 2.8 U | 0.83 U | 0.83 U | 8.3 U | 0.83 U | 0.83 U | 1 U | 0.83 U | 1 U | 0.83 U | 1 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 1 U | 0.31 U | 0.31 U | 3.1 U | **0.073 J** | 0.31 U | 1 U | 0.31 U | 1 U | 0.31 U | 1 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 1.2 U | 0.35 U | 0.35 U | 3.5 U | 0.35 U | 0.35 U | 1 U | 0.35 U | 1 U | **0.11 J** | 1 U |
| Butane | | 106-97-8 | NE | NE | **14** | **4.7** | **3.4** | **2 J** | **9.8** | **5.1** | NA | **1.1** | NA | **2.5** | NA |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | **6.5** | 0.97 U | 0.97 U | **1.8 J** | **0.23 J** | 0.97 U | NA | 0.97 U | NA | 0.97 U | NA |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **4.2** | **0.14 J** | **0.12 J** | **0.97 J** | **0.51 J** | **0.091 J** | 1 U | **0.77** | 1 U | **0.21 J** | 1 U |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.72** | **0.6** | **0.61** | 2 U | **0.54** | **0.53** | **0.33** | **0.41** | **0.37** | **0.53** | **0.43** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 1.2 U | 0.37 U | 0.37 U | 3.7 U | 0.37 U | 0.37 U | 1 U | 0.37 U | 1 U | 0.37 U | 1 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.7 U | 0.21 U | 0.21 U | 2.1 U | **0.37** | 0.21 U | 1 U | 0.21 U | 1 U | 0.21 U | 1 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **1.3 J** | **0.18 J** | **0.15 J** | **1.4 J** | **1.8** | **0.14 J** | **1.37** | **2** | 1 U | **0.2 J** | 1 U |
| Chloromethane | | 74-87-3 | 3.7 | NE | **0.77 J** | **1.2** | **1.3** | 4.1 U | **1.6** | **1.7** | 1 U | **0.64** | 1 U | **1.1** | **1.05** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 2.8 U | 0.83 U | 0.83 U | 8.3 U | 0.83 U | 0.83 U | NA | 0.83 U | NA | 0.83 U | NA |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | 1.9 U | **0.13 J** | **0.12 J** | 5.6 U | 0.56 U | 0.56 U | 1 U | 0.56 U | **3.86** | **5** | **8.8** |
| Cyclohexane | | 110-82-7 | NE | NE | **0.91 J** | **0.34 J** | **0.27 J** | 6.9 U | **0.37 J** | **0.23 J** | 1 U | **0.54 J** | 1 U | **0.41 J** | 1 U |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **4.5 J** | **1.5 J** | **0.66 J** | **2.9 J** | **1.1 J** | **0.67 J** | NA | **1.7 J** | NA | **1.3 J** | NA |
| Dibromochloromethane | | 124-48-1 | NE | NE | 2.3 U | 0.68 U | 0.68 U | 6.8 U | 0.68 U | 0.68 U | 1 U | 0.68 U | 1 U | 0.68 U | 1 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 2 U | 0.61 U | 0.61 U | 6.1 U | 0.61 U | 0.61 U | 1 U | 0.61 U | 1 U | 0.61 U | 1 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 1.6 U | 0.48 U | 0.48 U | 4.8 U | 0.48 U | 0.48 U | 1 U | 0.48 U | 1 U | 0.48 U | 1 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 1.6 U | 0.48 U | 0.48 U | 4.8 U | 0.48 U | 0.48 U | 1 U | **0.18 J** | 1 U | 0.48 U | 1 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 1.6 U | 0.48 U | 0.48 U | 4.8 U | 0.48 U | 0.48 U | 1 U | **0.1 J** | 1 U | **0.17 J** | 1 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **3.1** | **3.2** | **3.8** | **2.8 J** | **3.5** | **3.2** | **1.46** | **2.6** | **1.68** | **2.8** | **1.63** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | **12** | 0.32 U | 0.32 U | **12** | **0.26 J** | 0.32 U | **19.5** | **30** | 1 U | 0.32 U | 1 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 1.1 U | 0.32 U | **0.25 J** | 3.2 U | **0.19 J** | **0.11 J** | 1 U | 0.32 U | 1 U | 0.32 U | 1 U |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.53 U | 0.16 U | 0.16 U | 1.6 U | **2.6** | 0.16 U | 0.2 U | 0.16 U | 0.2 U | 0.16 U | 0.2 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.53 U | 0.16 U | 0.16 U | 1.6 U | **0.11 J** | 0.16 U | 0.2 U | 0.16 U | 0.2 U | 0.16 U | 0.2 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 1.1 U | 0.32 U | 0.32 U | 3.2 U | **2.9** | 0.32 U | 1 U | 0.32 U* | 1 U | 0.32 U* | 1 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 1.2 U | 0.37 U | 0.37 U | 3.7 U | 0.37 U | 0.37 U | 1 U | 0.37 U | 1 U | 0.37 U | 1 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 1.2 U | 0.36 U | 0.36 U | 3.6 U | 0.36 U | 0.36 U | 1 U | 0.36 U | 1 U | 0.36 U | 1 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 1.2 U | 0.36 U | 0.36 U | 3.6 U | 0.36 U | 0.36 U | 1 U | 0.36 U | 1 U | 0.36 U | 1 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 2.4 U | 0.72 U | 0.72 U | 7.2 U | 0.72 U | 0.72 U | 1 U | **0.24 J** | 1 U | 0.72 U | 1 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | **1.6 J** | **0.43 J** | 2.8 U | 28 U | **0.49 J** | 2.8 U | NA | **1.2 J** | NA | **0.49 J** | NA |
| Ethanol | | 64-17-5 | 210 | NE | **310** | **38** | **11** | **180** | **99** | **15** | **68.2** | **97** | **21.5** | **18** | **21.8** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | **2.76** | NA | **3.06** |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 2.6 U | **0.37 J** | **0.2 J** | 7.9 U | 0.79 U | **0.18 J** | 1 U | 0.79 U | 1 U | 0.79 U | 1 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | **0.9 J** | **0.81** | **0.41 J** | 1 U | **1.4** | 1 U | **0.69 J** | 1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Facilities Building (Building 21) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Building | | | | | | | | | | | | | | | | |
| Matrix | | | | | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | Soil Vapor | Indoor Air | | | |
| Sample Name | | | | | GPEC-SV 306 | GPEC-IA 306 | GPEC-OA FACILITIES | GPEC-SV306 | GPEC-IA306 | GPEC-OAFACILITIES | GPEC-SV-306 | GPEC-SV-306 | GPEC-IA-306 | GPEC-IA-306 | GPEC-IA-FACILITIES 2ND |
| Sample Date | | | | | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/21/2019 | 3/21/2019 | 3/21/2019 | 6/10/2019 | 6/11/2019 | 6/10/2019 | 6/11/2019 | 6/10/2019 |
| Parent Sample | | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **2.5 J** | **0.74 J** | **0.52 J** | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 2.8 U | 0.85 U | 0.85 U | 8.5 UJ | 0.85 U | 0.85 U | 1 U | 0.85 U | 1 U | 0.85 U | 1 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **3.7** | **0.75** | **0.62 J** | 7 U | **1** | **0.68 J** | 1 U | **1.1** * | **1.44** | **0.82** * | **1.27** |
| 2-Hexanone | | 591-78-6 | NE | NE | 2.7 U | 0.82 U | 0.82 U | 8.2 UJ | 0.82 U | 0.82 U | 1 U | 0.82 U | 1 U | 0.82 U | 1 U |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | 48 U | 4.8 U | 4.8 U | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | 48 U | 4.8 U | 4.8 U | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **21** | **1.5** | **1.1** | **16** | **2.5** | **0.83 J** | **2.52** | **5.8** | 1 U | **2.1** | 1 U |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 1.9 U | 0.58 U | 0.58 U | 5.8 U | 0.58 U | 0.58 U | 1 U | 0.58 U | 1 U | 0.58 U | 1 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | **1.3 J** | 0.82 U | 0.82 U | **72 J** | **0.34 J** | 0.82 U | **2.6** | **3.4** | 1 U | **0.41 J** | 1 U |
| Methylene chloride | | 75-09-2 | 10 | 60 | **2.2 J** | **1.7** | **1.9** | **5.7 J** | **7.8** | **2.1** | 3 U | **2.1** | **17.3** | **3.8** | **14.9** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 19 U* | 5.8 U* | 5.8 U* | 58 UJ | 5.8 UJ | 5.8 UJ | NA | 5.8 U | NA | 5.8 U | NA |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 19 U* | 5.8 U* | 5.8 U* | 58 UJ | 5.8 UJ | 5.8 UJ | NA | 5.8 U | NA | 5.8 U | NA |
| Naphthalene | | 91-20-3 | 5.1 | NE | 3.5 U | 1 U | 1 U | 10 U | 1 U | 1 U | NA | 1 U | NA | 1 U | NA |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.95 J** | **0.64 J** | **0.41 J** | 10 U | **0.62 J** | **0.44 J** | NA | **0.66 J** | NA | **0.54 J** | NA |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **6.9** | **0.26 J** | **0.24 J** | **0.99 J** | **0.25 J** | **0.2 J** | NA | **1** | NA | **0.24 J** | NA |
| Pentane | | 109-66-0 | NE | NE | **4.8** | **1.3** | **1.2** | 12 U | **1.9** | **1.5** | NA | **1.1 J** | NA | **1.4** | NA |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **14** | **13** | **1.7 J** | **10 J** | **40** | **1.4 J** | **2.8** | **2.4 CI** | **6.78** | **2.3 CI** | **2.92** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| Styrene | | 100-42-5 | 1.9 | NE | 1.1 U | **0.23 J** | 0.34 U | 3.4 U | **0.27 J** | **0.1 J** | 1 U | **1.2** | 1 U | **0.76** | 1 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | 1 U | NA | 1 U | NA | 1 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 1.8 U | 0.55 U | 0.55 U | 5.5 U | 0.55 U | 0.55 U | 1 U | 0.55 U | 1 U | 0.55 U | 1 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **2.1** | **2.8** | **1.5** | **1.9 J** | **3.4** | **0.81** | **1.12** | **1.3** | **0.48** | **0.7** | **0.5** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | **12.4** | NA | 1 U | NA | 1 U |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | 55 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | 55 UJ | 5.5 UJ | 5.5 UJ | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | 34 U | 3.4 U | 3.4 U | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.69 J** | **0.55 J** | **0.56 J** | 6.1 U | **0.61 J** | **0.61 J** | 1 U | **0.61 J*** | 1 U | **0.66** * | 1 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 2 U | 0.59 U | 0.59 U | 5.9 U | 0.59 U | 0.59 U | 1 U | 0.59 U | 1 U | 0.59 U | 1 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | **6.5** | 0.44 U | 0.44 U | **11** | 0.44 U | 0.44 U | **21.3** | **30** | 1 U | 0.44 U | 1 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 1.5 U | 0.44 U | 0.44 U | 4.4 U | **3** | 0.44 U | 1 U | 0.44 U | 1 U | 0.44 U | 1 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | **1.3** | **1.8** | 0.19 U | **730** | **1,800** | **0.24** | **3.1** | **4.7** | **0.44** | **0.51** | **0.56** |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.8** | **1.8** | **2** | **7.5** | **2.1** | **1.9** | **1.26** | **1.9** | **1.18** | **1.6** | **1.22** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | **0.98 J** | **0.29 J** | 0.39 U | 3.9 U | **0.37 J** | 0.39 U | NA | **0.21 J** | NA | **0.19 J** | NA |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **1.5** | **0.59** | **0.45** | 3.9 U | **0.87** | **0.42** | 1 U | **0.57** | 1 U | **0.47** | 1 U |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 1.3 U | **0.18 J** | **0.13 J** | 3.9 U | **0.26 J** | 0.39 U | 1 U | **0.18 J** | 1 U | **0.13 J** | 1 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **1.4 J** | **0.54 J** | **0.45 J** | **2 J** | **0.61 J** | **0.6 J** | NA | **0.44 J** | NA | **0.78 J** | NA |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **1.5 J** | **0.98 J** | **0.37 J** | 26 U | **0.48 J** | **0.28 J** | NA | **0.54 J** | NA | **0.65 J** | NA |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 1.2 U | 0.35 U | 0.35 U | 3.5 U | 0.35 U | 0.35 U | NA | 0.35 U | NA | 0.35 U | NA |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.34 U | 0.1 U | 0.1 U | 1 U | 0.1 U | 0.1 U | 0.2 U | 0.1 U* | 0.2 U | 0.1 U* | 0.2 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Facilities Building (Building 21) | | Facilities Building (Building 21) | Service Building (Building B) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Outdoor Air | Soil Vapor | | | | Indoor Air | | | Outdoor Air |
| Sample Name | | | | | GPEC-IA-FACILITIES 2ND | GPEC-OA-FACILITIES | GPEC-OA FACILITIES | GPEC-SV 311 | GPEC-SV 312 | GPEC-SV 313 | GPEC-SV 314 | GPEC-IA 311 | GPEC-IA 312 | GPEC-IA 313 | GPEC-IA 314 |
| Sample Date | | | | | 6/11/2019 | 6/10/2019 | 6/11/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| Parent Sample | | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| **BTEX** | µg/m$^3$ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **0.45** | 1 U | **0.38** | **1.5 J** | **0.71 J** | **0.79 J** | **1.2 J** | **0.63** | **1.1** | **0.73** | **0.68** |
| Toluene | | 108-88-3 | 43 | NE | **2.6** | **2.15** | **1.4** | 4.5 U | **2.1** | 4.5 U | 4.5 U | **0.67** | **2** | **2.8** | **1.5** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **0.42** | 1 U | **1.3** | 3.5 U | **0.57 J** | 3.5 U | 3.5 U | 0.35 U | **0.35** | **0.33 J** | **0.24 J** |
| o-Xylene | | 95-47-6 | 7.9 | NE | **0.54** | 1 U | **3.9** | 3.5 U | **0.75 J** | 3.5 U | 3.5 U | 0.35 U | **0.39** | **0.37** | **0.28 J** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **1.6** | **1.61** | **1.3** | 3.5 U | **1.9** | **2.5 J** | 3.5 U | 0.35 U | **1.1** | **1.1** | **0.8** |
| **Other VOCs** | µg/m$^3$ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **16** | **31.1** | **42** | **30 J** | **23** | **30 J** | **73** | **24 CI** | **20** | **18** | **9.8** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.25 U | NA | 0.25 U | 2.5 U | 0.83 U | 2.5 U | 2.5 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 0.83 U | 1 U | 0.83 U | 8.3 U | 2.8 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 0.54 U | 1 U | 0.54 U | 5.4 U | 1.8 U | 5.4 U | 5.4 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 0.83 U | 1 U | 0.83 U | 8.3 U | 2.8 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 0.31 U | 1 U | 0.31 U | 3.1 U | 1 U | 3.1 U | 3.1 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 0.35 U | 1 U | 0.35 U | 3.5 U | 1.2 U | 3.5 U | 3.5 U | **0.095 J** | **0.35** | 0.35 U | 0.35 U |
| Butane | | 106-97-8 | NE | NE | **2.1** | NA | **2.2** | **2 J** | **1.4** | 3.8 U | **6.5** | **3.5** | **4.2** | **5.4** | **3.7** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | 0.97 U | NA | **0.32 J** | **6.7 J** | **6** | **4.7 J** | **14** | **0.55 J** | **1** | **0.59 J** | **0.55 J** |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **0.21 J** | 1 U | **0.089 J** | **51** | **3.4** | **9.2** | **3.6 J** | **0.059 J** | **0.24 J** | **0.3 J** | **0.11 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.46** | **0.4** | **0.42** | **2.1** | **0.73** | **2** | 2 U | **0.44** | **0.44** | **0.45** | **0.44** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 0.37 U | 1 U | 0.37 U | 3.7 U | 1.2 U | 3.7 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.21 U | 1 U | 0.21 U | 2.1 U | 0.7 U | 2.1 U | 2.1 U | 0.21 U | **0.049 J** | **0.054 J** | 0.21 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **0.14 J** | 1 U | **0.26 J** | **4.8** | **2.8** | **2.3 J** | 3.9 U | **0.14 J** | **0.14 J** | **0.15 J** | **0.14 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | **1.2** | **1.1** | **1.3** | 4.1 U | 1.4 U | 4.1 U | **2.3 J** | **1.4** | **1.6** | **1.6** | **1.5** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 0.83 U | NA | 0.83 U | 8.3 U | 2.8 U | 8.3 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | **9.8** | **5.36** | **5.4** | 5.6 U | 1.9 U | 5.6 U | 5.6 U | **0.12 J** | **0.12 J** | **0.12 J** | **0.12 J** |
| Cyclohexane | | 110-82-7 | NE | NE | **0.32 J** | 1 U | **0.4 J** | 6.9 U | **0.33 J** | 6.9 U | **1.3 J** | **0.16 J** | **0.23 J** | **0.54 J** | **0.15 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **0.9 J** | NA | **0.29 J** | **23** | **14** | **23** | **23 J** | 2.3 U | **0.9 J** | **0.67 J** | **1.9 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 0.68 U | 1 U | 0.68 U | 6.8 U | 2.3 U | 6.8 U | 6.8 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 0.61 U | 1 U | 0.61 U | 6.1 U | 2 U | 6.1 U | 6.1 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 0.48 U | 1 U | 0.48 U | 4.8 U | 1.6 U | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 0.48 U | 1 U | 0.48 U | 4.8 U | **1.1 J** | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | **0.13 J** | 1 U | 0.48 U | 4.8 U | 1.6 U | 4.8 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **2.6** | **1.76** | **2.5** | **3 J** | **2.8** | **2.7 J** | **3 J** | **2.9** | **2.7** | **2.8** | **2.9** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 0.32 U | 1 U | 0.32 U | **1.8 J** | **1.2** | **11** | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | **0.056 J** | 1 U | **0.058 J** | 3.2 U | 1.1 U | 3.2 U | 3.2 U | **0.083 J** | **0.09 J** | **0.11 J** | **0.085 J** |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.16 U | 0.2 U | 0.16 U | 1.6 U | 0.53 U | 1.6 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.16 U | 0.2 U | 0.16 U | 1.6 U | 0.53 U | 1.6 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 0.32 U* | 1 U | 0.32 U* | 3.2 U | 1.1 U | 3.2 U | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 0.37 U | 1 U | 0.37 U | 3.7 U | 1.2 U | 3.7 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 0.36 U | 1 U | 0.36 U | 3.6 U | 1.2 U | 3.6 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 0.36 U | 1 U | 0.36 U | 3.6 U | 1.2 U | 3.6 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 0.72 U | 1 U | 0.72 U | 7.2 U | 2.4 U | 7.2 U | 7.2 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 2.8 U | NA | 2.8 U | **16 J** | **4.3 J** | **3.3 J** | **4.7 J** | 2.8 U | **0.38 J** | **0.42 J** | **0.43 J** |
| Ethanol | | 64-17-5 | 210 | NE | **12** | **277 E** | **680** | **300** | **220** | **320** | **620** | **210** | **1200** | **340** | **320** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | **1.38** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | **0.13 J** | 1 U | **0.27 J** | 7.9 U | 2.6 U | 7.9 U | 7.9 U | 0.79 U | **0.16 J** | **0.15 J** | **0.14 J** |
| n-Heptane (C7) | | 142-82-5 | NE | NE | **0.62 J** | 1 U | **0.64 J** | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Facilities Building (Building 21) | | Facilities Building (Building 21) | Service Building (Building B) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Outdoor Air | Soil Vapor | | | | Indoor Air | | | Outdoor Air |
| Sample Name | | | | | GPEC-IA-FACILITIES 2ND | GPEC-OA-FACILITIES | GPEC-OA FACILITIES | GPEC-SV 311 | GPEC-SV 312 | GPEC-SV 313 | GPEC-SV 314 | GPEC-IA 311 | GPEC-IA 312 | GPEC-IA 313 | GPEC-IA 314 |
| Sample Date | | | | | 6/11/2019 | 6/10/2019 | 6/11/2019 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| Parent Sample | | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | NA | NA | NA | 8.2 U | **0.4 J** | **1.9 J** | **1.1 J** | **0.18 J** | **0.38 J** | **0.61 J** | **0.34 J** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 0.85 U | 1 U | 0.85 U | 8.5 U | 2.8 U | 8.5 U | 8.5 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **0.81** * | **1.16** | **0.92** * | **1 J** | **0.44 J** | **2.6 J** | **3.4 J** | **0.43 J** | **0.54 J** | **1.2** | **0.46 J** |
| 2-Hexanone | | 591-78-6 | NE | NE | 0.82 U | 1 U | 0.82 U | 8.2 U | **0.62 J** | 8.2 U | 8.2 U | 0.82 U | 0.82 U | **0.21 J** | 0.82 U |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **2** | **7.72** | **15** | **9.8** | **7.1** | **9.2 J** | **15** | **2.4** | **0.92 J** | **1.7** | **0.85 J** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 0.58 U | 1 U | 0.58 U | 5.8 U | 1.9 U | 5.8 U | 5.8 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | **0.25 J** | 1 U | **0.41 J** | 8.2 U | **1.1 J** | 8.2 U | 8.2 U | 0.82 U | 0.82 U | **0.34 J** | 0.82 U |
| Methylene chloride | | 75-09-2 | 10 | 60 | **5.4** | **9.41** | **1.7** | **4.6 J** | **1.7 J** | **4.6 J** | **5.9 J** | **0.97** | **0.96** | **1.3** | **0.96** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 5.8 U | NA | 5.8 U | 58 U* | 19 U* | 58 U* | 58 U* | 5.8 U* | 5.8 U* | 5.8 U* | 5.8 U* |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 5.8 U | NA | 5.8 U | 58 U* | 19 U* | 58 U* | 58 U* | 5.8 U* | 5.8 U* | 5.8 U* | 5.8 U* |
| Naphthalene | | 91-20-3 | 5.1 | NE | 1 U | NA | 1 U | 10 U | 3.5 U | 10 U | 10 U | 1 U | 1 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.44 J** | NA | **0.3 J** | 10 U | **1.9 J** | **4.8 J** | **1 J** | 1 U | **0.54 J** | **0.44 J** | **0.45 J** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **0.19 J** | NA | **0.65 J** | **12** | **5.1** | **7.4** | **9.4** | 0.75 U | **0.28 J** | **0.35 J** | **0.2 J** |
| Pentane | | 109-66-0 | NE | NE | **1.2** | NA | **1.3** | 12 U | 3.9 U | 12 U | **17** | **13** | **8.3** | **8.3** | **16** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **1.6 J** | **2.65** | **2.4** | **16 J*** | **9.1** * | **17 J*** | **35** * | **6.9** * | **31** * | **41** * | **13** * |
| Propene | | 115-07-1 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | **0.55** | 1 U | 0.34 U | 3.4 U | 1.1 U | 3.4 U | 3.4 U | 0.34 U | **0.11 J** | 0.34 U | **0.11 J** |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | 1 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 0.55 U | 1 U | 0.55 U | 5.5 U | 1.8 U | 5.5 U | 5.5 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **0.43 J** | **0.54** | **3.7** | **540** | **2.4** | **5.5** | 5.4 U | **0.39 J** | **0.68** | **0.54 J** | **0.41 J** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | **28.8** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.5 J*** | 1 U | **0.53 J*** | 6.1 U | **1.6 J** | 6.1 U | 6.1 U | **0.54 J** | **0.54 J** | **0.55 J** | **0.55 J** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 0.59 U | 1 U | 0.59 U | 5.9 U | 2 U | 5.9 U | 5.9 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 0.44 U | 1 U | 0.44 U | **200** | **100** | **200** | **1.1 J** | 0.44 U | **0.15 J** | **0.17 J** | 0.44 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 0.44 U | 1 U | 0.44 U | 4.4 U | 1.5 U | 4.4 U | 4.4 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | **0.44** | 0.2 U | **0.096 J** | **31** | 0.64 U | **1.4 J** | 1.9 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.5** | **1.19** | **1.4** | **2 J** | **1.5** | **1.8 J** | **1.8 J** | **1.5** | **1.5** | **1.6** | **1.5** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 0.39 U | NA | 0.39 U | 3.9 U | 1.3 U | 3.9 U | 3.9 U | 0.39 U | 0.39 U | 0.39 U | 0.39 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **0.41** | 1 U | 0.39 U | 3.9 U | **1.5** | **1.5 J** | **1.3 J** | 0.39 U | **0.4** | **0.32 J** | **0.31 J** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | **0.13 J** | 1 U | **0.24 J** | 3.9 U | 1.3 U | 3.9 U | 3.9 U | 0.39 U | 0.39 U | 0.39 U | 0.39 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **0.66 J** | NA | **0.42 J** | 9.3 U | **3.2** | **29** | **37** | **0.17 J** | **0.38 J** | **0.36 J** | **0.34 J** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **0.39 J** | NA | 2.6 U | **3.2 J** | **2.9 J** | **3 J** | **2.6 J** | 2.6 U | **0.47 J** | **0.46 J** | **0.52 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 0.35 U | NA | 0.35 U | 3.5 U | 1.2 U | 3.5 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.1 U* | 0.2 U | 0.1 U* | 1 U | 0.34 U | 1 U | 1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Service Building (Building B) | LNG South Storage Building | | | LNG Control House | | LNG Control House | | | Meter Operations Building | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | | Indoor Air | | Outdoor Air | Soil Vapor | |
| Sample Name | | | | | GPEC-OA SERVICE | GPEC-SV331 | GPEC-IA331 | GPEC-OASSTORAGE | GPEC-SV325 | GPEC-SV326 | GPEC-IA325 | GPEC-IA326 | GPEC-OALNGCONTROL | GPEC-SV301 | GPEC-SV302 |
| Sample Date | | | | | 3/27/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/24/2018 | 3/24/2018 |
| Parent Sample | | | | | | | | | | | | | | | |
| **Analyte** | **Units** | **CAS No.** | **EPA BASE Indoor Air Concentrations 90th Percentile Range[1]** | **NYSDOH Air Guideline Values** | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **1.2** | 26 U | **0.4** | **0.41** | **1.3** | **0.77** | **0.55** | **0.7** | **0.38** | **5.3** | **12** |
| Toluene | | 108-88-3 | 43 | NE | **1.7** | 45 U | **12** | **0.74** | **11** | **15** | **0.89** | **1.1** | **0.57** | **46** | 21 U |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **0.32 J** | 35 U | **0.13 J** | **0.24 J** | **1.9** | **2.2** | **0.17 J** | **0.14 J** | 0.35 U | **4 J** | 16 U |
| o-Xylene | | 95-47-6 | 7.9 | NE | **0.41** | 35 U | **0.16 J** | **0.35** | **2.7** | **3.1** | **0.22 J** | **0.17 J** | **0.13 J** | **5.2 J** | 16 U |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **1.2** | 35 U | **0.43** | **0.95** | **6.9** | **8** | **0.58** | **0.47** | **0.35** | **14** | 16 U |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **23 CI** | **140 J** | **3.9 J** | **3 J** | **92** | **100** | **4 J** | **7.9** | **4.2 J** | **740** | **560** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.25 U | 25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 5 U | 11 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 0.83 U | 83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 17 U | 38 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 0.54 U | 54 U | 0.54 U | 0.54 U | **0.12 J** | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 11 U | 24 U |
| Bromoform | | 75-25-2 | NE | NE | 0.83 U | 83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 17 U | 38 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 0.31 U | 31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 6.2 U | 14 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 0.35 U | 35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 7.1 U | 16 U |
| Butane | | 106-97-8 | NE | NE | **5.2** | 38 U | **2.5** | **3.5** | **9.5** | **2.3** | **12** | **47** | **3.8** | **420** | **1700** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | **0.35 J** | 97 U | 0.97 U | **0.046 J** | **27** | **25** | 0.97 U | 0.97 U | 0.97 U | **91** | **74** |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **0.2 J** | 62 U | **0.096 J** | **0.6 J** | **3.2** | **0.57 J** | **0.054 J** | **0.15 J** | **0.053 J** | **43** | **29** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.45** | 20 U | **0.57** | **0.43** | **0.69** | **0.56** | **0.65** | **0.42** | **0.4** | 4 U | 9.2 U |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 0.37 U | 37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 7.4 U | 17 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.21 U | 21 U | 0.21 U | 0.21 U | **0.077 J** | **0.076 J** | 0.21 U | 0.21 U | 0.21 U | 4.2 U | 9.6 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **0.12 J** | 39 U | **0.11 J** | **0.11 J** | **2.6** | **0.2 J** | **1.2** | **0.12 J** | **0.1 J** | 7.8 U | 18 U |
| Chloromethane | | 74-87-3 | 3.7 | NE | **1.5** | 41 U | **1.1** | **1.4** | **0.64** | **0.31 J** | **1.2** | **1.5** | **1.3** | 8.3 U | 19 U |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 0.83 U | 83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 17 U | 38 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | **0.12 J** | 56 U | **0.11 J** | **0.11 J** | **0.13 J** | **0.12 J** | **0.12 J** | **0.12 J** | **0.12 J** | 11 U | 25 U |
| Cyclohexane | | 110-82-7 | NE | NE | **0.23 J** | 69 U | **0.18 J** | **0.11 J** | **1.9** | **0.58 J** | **0.35 J** | **0.36 J** | **0.11 J** | **7.3 J** | **9.9 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **0.58 J** | 230 U | **0.66 J** | **0.42 J** | **8.4** | **6.6** | **0.76 J** | **0.91 J** | **0.4 J** | **6.5 J** | **7.6 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 0.68 U | 68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 14 U | 31 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 0.61 U | 61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 12 U | 28 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 0.48 U | 48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 9.6 U | 22 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 0.48 U | 48 U | 0.48 U | 0.48 U | **9.1** | **14** | 0.48 U | 0.48 U | 0.48 U | **7.8 J** | 22 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 0.48 U | 48 U | 0.48 U | 0.48 U | **0.2 J** | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 9.6 U | 22 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **2.8** | 40 U | **2.8** | **2.7** | **2.7** | **2.5** | **3** | **2.7** | **2.6** | **580** | **1700** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 0.32 U | 32 U | 0.32 U | 0.32 U | **2.1** | **0.098 J** | 0.32 U | 0.32 U | 0.32 U | **5.3 J** | **5.8 J** |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | **0.08 J** | 32 U | 0.32 U | 0.32 U | **0.47** | **0.12 J** | 0.32 U | 0.32 U | 0.32 U | 6.5 U | 15 U |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.16 U | 16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 3.2 U | 7.2 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.16 U | 16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 3.2 U | 7.2 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 0.32 U | 32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | **3.3 J** | 14 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 0.37 U | 37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 7.4 U | 17 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 0.36 U | 36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 7.3 U | 17 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 0.36 U | 36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 7.3 U | 17 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 0.72 U | 72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 14 U | 33 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | **0.22 J** | 280 U | **0.36 J** | 2.8 U | **5.7** | **2.5 J** | **0.46 J** | **1 J** | 2.8 U | 56 U | 130 U |
| Ethanol | | 64-17-5 | 210 | NE | **15** | **430** | **8.9** | **5.9** | **330** | **440** | **10** | **15** | **5.5** | **2800** | **3100** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | **0.15 J** | 79 U | 0.79 U | **0.17 J** | **0.77** | **0.98** | 0.79 U | 0.79 U | 0.79 U | 16 U | 36 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Service Building (Building B) | LNG South Storage Building | | | LNG Control House | | LNG Control House | | | Meter Operations Building | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | | Indoor Air | | Outdoor Air | Soil Vapor | |
| Sample Name | | | | | GPEC-OA SERVICE | GPEC-SV331 | GPEC-IA331 | GPEC-OASSTORAGE | GPEC-SV325 | GPEC-SV326 | GPEC-IA325 | GPEC-IA326 | GPEC-OALNGCONTROL | GPEC-SV301 | GPEC-SV302 |
| Sample Date | | | | | 3/27/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/24/2018 | 3/24/2018 |
| Parent Sample | | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **0.46 J** | 82 U | **0.15 J** | **0.2 J** | **0.97** | **0.89** | **0.27 J** | **0.41 J** | **0.17 J** | **9.2 J** | **7.7 J** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 0.85 U | 85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 17 U | 39 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **0.71** | 70 U | **0.61 J** | **0.43 J** | **19** | **1.4** | **0.85** | **1.9** | **0.36 J** | **38** | **78** |
| 2-Hexanone | | 591-78-6 | NE | NE | **0.45 J** | 82 U | 0.82 U | 0.82 U | **0.53 J** | **0.58 J** | 0.82 U | 0.82 U | 0.82 U | 16 U | 37 U |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **2.6** | **39 J** | **0.58 J** | **0.38 J** | **33** | **43** | **0.52 J** | **0.87 J** | **0.41 J** | **140** | **87** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 0.58 U | 58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 12 U | 26 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | **0.55 J** | 82 U | **0.46 J** | 0.82 U | **2.3** | **0.9** | 0.82 U | **2** | 0.82 U | 16 U | 37 U |
| Methylene chloride | | 75-09-2 | 10 | 60 | **1** | **66 J** | **1.4** | **2.5** | **53** | **3** | **1.6** | **0.81** | **0.86** | **9.5 J** | **21 J** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 5.8 U* | 580 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 120 UJ | 260 UJ |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 5.8 U* | 580 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 120 UJ | 260 UJ |
| Naphthalene | | 91-20-3 | 5.1 | NE | 1 U | 100 U | 1 U | 1 U | **0.21 J** | 1 U | 1 U | 1 U | 1 U | 21 U | 48 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.38 J** | 100 U | **0.15 J** | **0.22 J** | **2.3** | **2** | **0.14 J** | **0.42 J** | **0.13 J** | **3.2 J** | 48 U |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **0.24 J** | 75 U | **0.12 J** | **0.2 J** | **2.7** | **2.1** | **0.13 J** | **0.2 J** | **0.12 J** | **11 J** | **14 J** |
| Pentane | | 109-66-0 | NE | NE | **1.6** | 120 U | **0.8 J** | **1 J** | **13** | **1.8** | **3.7** | **10** | **1.1 J** | **170** | **510** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **2.2** * | **160 J** | **0.73 J** | **0.58 J** | **91** | **110** | **0.63 J** | **1.7 J** | **0.4 J** | **430** | **330** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 0.34 U | 34 U* | 0.34 U* | 0.34 U | **0.43** | **0.42** | 0.34 U* | 0.34 U | 0.34 U | 6.8 U | 15 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 0.55 U | 55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 11 U | 25 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **0.42 J** | 54 U | **0.22 J** | **0.23 J** | **0.92** | **1.3** | **0.54** | **0.46 J** | **0.49 J** | **3 J** | 25 U |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.56 J** | **930** | **0.72** | **0.55 J** | **7.4** | **0.62** | **0.58 J** | **0.55 J** | **0.53 J** | 12 U | 28 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 0.59 U | 59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 12 U | 27 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 0.44 U | **370** | **0.079 J** | 0.44 U | **28** | **15** | 0.44 U | **0.1 J** | 0.44 U | **1.6 J** | 20 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 0.44 U | 44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 8.7 U | 20 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 0.19 U | 19 U | 0.19 U | 0.19 U | **0.31** | **0.097 J** | 0.19 U | 0.19 U | 0.19 U | 3.9 U | 8.8 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.5** | **5800** | **2.3** | **1.5** | **130** | **2.3** | **1.7** | **1.4** | **1.3** | **1.1 J** | 20 U |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 0.39 U | 39 U | 0.39 U | 0.39 U | **0.86** * | **0.84** * | 0.39 U | 0.39 U* | 0.39 U* | 7.9 U | 18 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **0.35 J** | 39 U | 0.39 U | **0.6** | **3.3** | **3.5** | **0.19 J** | **0.23 J** | 0.39 U | **4.6 J** | 18 U |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 0.39 U | 39 U | 0.39 U | **0.18 J** | **0.75** | **0.86** | 0.39 U | 0.39 U | 0.39 U | 7.9 U | 18 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **0.47 J** | 93 U | **0.12 J** | **0.17 J** | **0.82 J** | **1** | **0.45 J** | **1** | **0.16 J** | **6.7 J** | **7.2 J** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **0.36 J** | 260 U | **0.53 J** | **0.18 J** | **7.8** | **5.1** | **0.5 J** | **0.53 J** | 2.6 U | **4.7 J** | 120 U |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 0.35 U | 35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 7 U | 16 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.1 U | 10 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 2 U | 4.6 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | Building | Meter Operations Building | | | | | | | Building 12 | | Building 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Matrix | Soil Vapor | | Indoor Air | Indoor Air | | | Outdoor Air | Soil Vapor | | Indoor Air | |
| | | | | | Sample Name | GPEC-SV303 | GPEC-SV304 | GPEC-IA301 | GPEC-IA302 | GPEC-IA303 | GPEC-IA304 | GPEC-OA METEROPS | GPEC-SV 307 | GPEC-SV 308 | GPEC-IA 307 | GPEC-IA XX- 03272018 |
| | | | | | Sample Date | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| | | | | | Parent Sample | | | | | | | | | | | GPEC-IA 307 |
| **Analyte** | **Units** | **CAS No.** | **EPA BASE Indoor Air Concentrations 90th Percentile Range[1]** | **NYSDOH Air Guideline Values** | | | | | | | | | | | | |
| **BTEX** | µg/m³ | | | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | 25 U | **1.7 J** | **0.58** | **0.6** | **0.58** | **0.57** | **0.55** | **2.2 J** | **0.94** | **1.4** | **1.4** |
| Toluene | | 108-88-3 | 43 | NE | **47** | **17** | **2.4** | **2.6** | **2.8** | **1.8** | **1.8** | **11** | **4.6** | **5.4** | **4.9** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | 34 U | **3.2 J** | **0.45** | **0.5** | **0.65** | **0.36** | **0.3 J** | **2.3 J** | **1 J** | **1.2** | **0.99** |
| o-Xylene | | 95-47-6 | 7.9 | NE | 34 U | **4.2** | **0.57** | **0.63** | **0.75** | **0.43** | **0.3 J** | **2.6 J** | **1.2** | **1.6** | **1.2** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | 34 U | **11** | **1.7** | **1.9** | **2.4** | **1.4** | **1.1** | **7.9** | **3.4** | **4.3** | **3.5** |
| **Other VOCs** | µg/m³ | | | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **1100** | **150** | **31** | **38** | **38** | **11** | **5.6** | **47** | **62** | **13** | **16** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 25 U | 2.5 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 2.5 U | 0.83 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 82 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 8.3 U | 2.8 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 53 U | 5.4 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 0.54 U | 5.4 U | 1.8 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 81 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 8.3 U | 2.8 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | 31 U | 3.1 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | **1.8 J** | 1 U | **0.15 J** | **0.17 J** |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | **22 J** | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 3.5 U | 1.2 U | 0.35 U | 0.35 U |
| Butane | | 106-97-8 | NE | NE | **570** | **5.2** | **5.1** | **4.9** | **9.2** | **4.8** | **5.1** | **1.8 J** | **1.3** | **11** | **11** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | **120** | **19** | **0.36 J** | **0.37 J** | **0.84 J** | **0.43 J** | 0.97 U | 9.7 U | **5** | 0.97 U | 0.97 U |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **15 J** | **6.7** | **0.71** | **1.7** | **2.9** | **0.16 J** | **0.053 J** | **0.43 J** | **0.43 J** | **0.14 J** | **0.22 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | 20 U | 2 U | **0.42** | **0.46** | **0.46** | **0.47** | **0.46** | 2 U | **0.79** | **0.62** | **0.7** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 36 U | 3.7 U | 0.37 U | **0.11 J** | 0.37 U | 0.37 U | 0.37 U | 3.7 U | 1.2 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 21 U | 2.1 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 2.1 U | 0.7 U | 0.21 U | 0.21 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | 38 U | 3.9 U | **0.14 J** | **0.18 J** | **0.3 J** | **0.12 J** | **0.12 J** | **0.8 J** | **0.25 J** | **0.25 J** | **0.28 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | 41 U | 4.1 U | **1.4** | **1.4** | **1.6** | **1.4** | **1.4** | 4.1 U | **0.51 J** | **1.4** | **1.4** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 82 U | 8.3 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 8.3 U | 2.8 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | 55 U | 5.6 U | **0.12 J** | **0.12 J** | **0.12 J** | **0.12 J** | **0.11 J** | 5.6 U | 1.9 U | **0.12 J** | **0.11 J** |
| Cyclohexane | | 110-82-7 | NE | NE | **9.6 J** | **1.4 J** | **0.23 J** | **0.2 J** | **0.85** | **0.18 J** | **0.19 J** | **1.6 J** | **0.44 J** | **1.1** | **1** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | 230 U | **18 J** | **1.5 J** | **2.1 J** | **2.5** | **0.63 J** | **0.34 J** | **2.3 J** | **2.9 J** | **1.5 J** | **1.3 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 67 U | 6.8 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 6.8 U | 2.3 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 61 U | 6.1 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 6.1 U | 2 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 47 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 4.8 U | 1.6 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 47 U | **6.7** | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 4.8 U | 1.6 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 47 U | 4.8 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 4.8 U | 1.6 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **1400** | **500** | **9.8** | **8.5** | **17** | **7.9** | **2.8** | **2.9 J** | **3** | **3.1** | **3.5** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | **28 J** | **11** | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | **2.7 J** | 1.1 U | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | 32 U | 3.2 U | **0.081 J** | **0.087 J** | 0.32 U | **0.084 J** | **0.08 J** | 3.2 U | 1.1 U | **0.12 J** | **0.14 J** |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 16 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 1.6 U | 0.53 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 16 U | 1.6 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 1.6 U | 0.53 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 31 U | 3.2 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 3.2 U | 1.1 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 36 U | 3.7 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 3.7 U | 1.2 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 36 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 3.6 U | 1.2 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 36 U | 3.6 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 3.6 U | 1.2 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 71 U | **3 J** | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 0.72 U | 7.2 U | 2.4 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | 270 U | **7.5 J** | **0.93 J** | **1.4 J** | **1.8 J** | **0.81 J** | 2.8 U | 28 U | 9.3 U | 2.8 U | **0.37 J** |
| Ethanol | | 64-17-5 | 210 | NE | **5800** | **820** | **51** | **55** | **140** | **140** | **9** | **320** | **310** | **94** | **99** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | 77 U | **2.2 J** | **0.15 J** | **0.16 J** | **0.18 J** | 0.79 U | 0.79 U | 7.9 U | 2.6 U | **0.95** | **0.78** |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Meter Operations Building | | | | | | | Building 12 | | Building 12 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Soil Vapor | | Indoor Air | Indoor Air | | | Outdoor Air | Soil Vapor | | Indoor Air | |
| Sample Name | | | | | GPEC-SV303 | GPEC-SV304 | GPEC-IA301 | GPEC-IA302 | GPEC-IA303 | GPEC-IA304 | GPEC-OA METEROPS | GPEC-SV 307 | GPEC-SV 308 | GPEC-IA 307 | GPEC-IA XX- 03272018 |
| Sample Date | | | | | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/24/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 |
| Parent Sample | | | | | | | | | | | | | | | GPEC-IA 307 |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **11 J** | **3 J** | **0.68 J** | **0.53 J** | **1.6** | **0.56 J** | **0.26 J** | **3.8 J** | **1.7 J** | **1.5** | **1.5** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 84 U | 8.5 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 8.5 U | 2.8 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **61 J** | **4 J** | **0.59 J** | **0.6 J** | **2** | **0.54 J** | **0.54 J** | **4.9 J** | **1.5 J** | **2.6** | **2.7** |
| 2-Hexanone | | 591-78-6 | NE | NE | 81 U | 8.2 U | 0.82 U | 0.82 U | **0.7 J** | 0.82 U | 0.82 U | 8.2 U | **0.54 J** | 0.82 U | **0.13 J** |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **170** | **38** | **1.1** | **1.1** | **4.2** | **0.88 J** | **0.64 J** | **17** | **21** | **1.2** | **1.6** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 57 U | 5.8 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 5.8 U | 1.9 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | 81 U | 8.2 U | **1.6** | **2** | **2** | **1.6** | 0.82 U | 8.2 U | **1.6 J** | **0.37 J** | **0.48 J** |
| Methylene chloride | | 75-09-2 | 10 | 60 | **46 J** | **5.1 J** | **1.3** | **1.1** | **1.1** | **0.99** | **1.6** | 6.9 U | **2.1 J** | **1.2** | **1.3** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 570 UJ | 58 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 58 U* | 19 U* | 5.8 U* | 5.8 U* |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 570 UJ | 58 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 5.8 UJ | 58 U* | 19 U* | 5.8 U* | 5.8 U* |
| Naphthalene | | 91-20-3 | 5.1 | NE | 100 U | **2.7 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 10 U | 3.5 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | 100 U | **2.8 J** | **1.9** | **2.5** | **2.7** | **0.92 J** | **0.22 J** | **1.3 J** | **0.79 J** | **1.2** | **1** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **24 J** | **120** | **2.5** | **3.2** | **2.4** | **1.4** | **0.18 J** | **7.6** | **1.2 J** | **0.63 J** | **0.55 J** |
| Pentane | | 109-66-0 | NE | NE | **210** | 12 U | **1.3** | **1.3** | **1.6** | **1.3** | **1.6** | 12 U | 3.9 U | **3.9** | **4.1** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **590** | **87** | **15** | **15** | **67** | **24** | **1.1 J** | **10 J** | **14** | **1.8 J** | **4.8** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 34 U | 3.4 U | 0.34 U | 0.34 U | 0.34 U | 0.34 U | 0.34 U | 3.4 U | 1.1 U | 0.34 U | 0.34 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 54 U | 5.5 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 5.5 U | 1.8 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | 53 U | **5 J** | **0.46 J** | **0.45 J** | **0.44 J** | **0.45 J** | **0.5 J** | 5.4 U | **1 J** | **0.73** | **0.7** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | 60 U | 6.1 U | **0.56 J** | **0.54 J** | **0.56 J** | **0.56 J** | **0.55 J** | **1.2 J** | **0.71 J** | **0.61** | **0.6 J** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 58 U | 5.9 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 5.9 U | 2 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | 43 U | **2.2 J** | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | **15** | **4** | **0.26 J** | **0.29 J** |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 43 U | 4.4 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 4.4 U | 1.5 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | 19 U | 1.9 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | 0.19 U | **3** | **2.2** | **0.22** | **0.22** |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | 44 U | **0.95 J** | **1.4** | **1.4** | **2.3** | **1.4** | **1.5** | **1.7 J** | **1.9** | **1.7** | **1.8** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | 39 U | 3.9 U | **0.2 J** | **0.26 J** | **0.19 J** | 0.39 U | 0.39 U | 3.9 U | **0.71 J** | **0.82** | **0.64** |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | 39 U | **6** | **0.47** | **0.58** | **0.51** | **0.26 J** | **0.17 J** | **2.8 J** | **1.3** | **3** | **2.2** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | 39 U | **1.4 J** | **0.13 J** | **0.16 J** | **0.14 J** | 0.39 U | 0.39 U | 3.9 U | 1.3 U | **0.88** | **0.67** |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **9.2 J** | **1.5 J** | **0.27 J** | **0.27 J** | **0.27 J** | **0.25 J** | **0.25 J** | **1.9 J** | **0.79 J** | **2** | **2** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | 250 U | **6.5 J** | **1.5 J** | **2 J** | **1.9 J** | **0.71 J** | 2.6 U | 26 U | **0.86 J** | **1.2 J** | **1.3 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 34 U | 3.5 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 3.5 U | 1.2 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 10 U | 1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 1 U | 0.34 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Building 12 | | Storage and Service Building (Building 19) | | Storage and Service Building (Building 19) | Welding Shop (Building 18) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | | Indoor Air | | Outdoor Air |
| Sample Name | | | | | GPEC-IA 308 | GPEC-OA BLDG 12 | GPEC-SV 333 | GPEC-IA 333 | GPEC-OA SANDS | GPEC-SV323 | GPEC-SV324 | GPEC-IA323 | GPEC-IA324 | GPEC-OAWELD |
| Sample Date | | | | | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 |
| Parent Sample | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | |
| **BTEX** | µg/m$^3$ | | | | | | | | | | | | | |
| Benzene | | 71-43-2 | 9.4 | NE | **1** | **0.68** | **0.71** | **0.56** | **0.62** | **0.7** | **0.62** | **0.69** | **0.7** | **0.42** |
| Toluene | | 108-88-3 | 43 | NE | **3.5** | **1.3** | **6.7** | **8.2** | **1.8** | **6.2** | **7.2** | **1** | **1.5** | **0.6** |
| Ethylbenzene | | 100-41-4 | 5.7 | NE | **0.66** | **0.22 J** | **0.45 J** | **0.2 J** | **0.22 J** | **1.6** | **1.6** | **0.18 J** | **0.3 J** | 0.35 U |
| o-Xylene | | 95-47-6 | 7.9 | NE | **0.77** | **0.28 J** | **0.57 J** | **0.24 J** | **0.27 J** | **2.2** | **2.3** | **0.2 J** | **0.32 J** | **0.13 J** |
| m/p-Xylene | | 179601-23-1 | 22.2 | NE | **2.3** | **0.8** | **1.5** | **0.68** | **0.77** | **5.4** | **5.7** | **0.55** | **0.98** | **0.35** |
| **Other VOCs** | µg/m$^3$ | | | | | | | | | | | | | |
| Acetone | | 67-64-1 | 98.9 | NE | **11** | **12** | **19** | **14 CI** | **16 CI** | **40** | **70** | **6.5** | **5.8** | **3.3 J** |
| Acrylonitrile | | 107-13-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Allyl chloride (3-Chloropropene) | | 107-05-1 | NE | NE | 0.25 U | 0.25 U | 0.63 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U | 0.25 U |
| Benzyl chloride | | 100-44-7 | <6.8 | NE | 0.83 U | 0.83 U | 2.1 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromodichloromethane | | 75-27-4 | NE | NE | 0.54 U | 0.54 U | 1.3 U | 0.54 U | 0.54 U | 0.54 U | **0.93** | 0.54 U | 0.54 U | 0.54 U |
| Bromoform | | 75-25-2 | NE | NE | 0.83 U | 0.83 U | 2.1 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Bromomethane | | 74-83-9 | <1.7 | NE | **0.16 J** | 0.31 U | 0.78 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U | 0.31 U |
| 1,3-Butadiene | | 106-99-0 | <3.0 | NE | 0.35 U | 0.35 U | **0.2 J** | 0.35 U | 0.35 U | 0.35 U | 0.35 U | **0.21 J** | **0.17 J** | 0.35 U |
| Butane | | 106-97-8 | NE | NE | **8.8** | **2.6** | **2.1** | **5.4** | **3.5** | **1.8** | **0.81** | **3.2** | **3.4** | **3.4** |
| t-Butyl alcohol (Tertiary Butyl Alcohol) | | 75-65-0 | NE | NE | **0.22 J** | **0.11 J** | **1.2 J** | **0.42 J** | **0.43 J** | **13** | **26** | 0.97 U | 0.97 U | 0.97 U |
| n-Butylbenzene | | 104-51-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| sec-Butylbenzene | | 135-98-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 4.2 | NE | **0.2 J** | **0.059 J** | **1.3 J** | **0.27 J** | **0.4 J** | **6.8** | **1.1** | **0.12 J** | **0.2 J** | **0.35 J** |
| Carbon tetrachloride | | 56-23-5 | <1.3 | NE | **0.7** | **0.61** | **1.2** | **0.43** | **0.44** | **0.36** | **0.7** | **0.55** | **0.58** | **0.68** |
| Chlorobenzene | | 108-90-7 | <0.9 | NE | 0.37 U | 0.37 U | 0.92 U | 0.37 U | 0.37 U | **3** | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| Chloroethane | | 75-00-3 | <1.1 | NE | 0.21 U | 0.21 U | 0.53 U | **0.038 J** | 0.21 U | 0.21 U | **0.14 J** | 0.21 U | 0.21 U | 0.21 U |
| Chloroform (Trichloromethane) | | 67-66-3 | 1.1 | NE | **0.25 J** | **0.13 J** | **0.25 J** | **0.13 J** | **0.11 J** | **0.32 J** | **230** | **0.18 J** | **0.16 J** | **0.12 J** |
| Chloromethane | | 74-87-3 | 3.7 | NE | **1.4** | **1.2** | 1 U | **1.3** | **1.4** | **0.26 J** | **0.4 J** | **1.2** | **1.2** | **1.3** |
| 2-Chlorotoluene (o-Chlorotoluene) | | 95-49-8 | NE | NE | 0.83 U | 0.83 U | 2.1 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U | 0.83 U |
| Cryofluorane (Freon 114) | | 76-14-2 | NE | NE | **0.13 J** | **0.14 J** | 1.4 U | **0.11 J** | **0.12 J** | **0.13 J** | **0.15 J** | **0.14 J** | **0.14 J** | **0.14 J** |
| Cyclohexane | | 110-82-7 | NE | NE | **0.72** | **0.13 J** | **0.4 J** | **0.69** | **0.18 J** | **0.58 J** | **0.4 J** | **0.23 J** | **0.23 J** | **0.15 J** |
| p-Cymene (4-Isopropyltoluene) | | 99-87-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| n-Decane (C10) | | 124-18-5 | 17.5 | NE | **1 J** | **0.39 J** | **15** | **0.46 J** | **0.48 J** | **16** | **5** | **0.53 J** | **0.59 J** | **0.36 J** |
| Dibromochloromethane | | 124-48-1 | NE | NE | 0.68 U | 0.68 U | 1.7 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U | 0.68 U |
| 1,2-Dibromoethane (EDB) | | 106-93-4 | <1.5 | NE | 0.61 U | 0.61 U | 1.5 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U | 0.61 U |
| 1,2-Dichlorobenzene (o-DCB) | | 95-50-1 | <1.2 | NE | 0.48 U | 0.48 U | 1.2 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| 1,3-Dichlorobenzene (m-DCB) | | 541-73-1 | <2.4 | NE | 0.48 U | 0.48 U | **1 J** | 0.48 U | 0.48 U | **6.5** | **6.5** | 0.48 U | 0.48 U | 0.48 U |
| 1,4-Dichlorobenzene (p-DCB) | | 106-46-7 | 5.5 | NE | 0.48 U | 0.48 U | 1.2 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U | 0.48 U |
| Dichlorodifluoromethane (Freon 12) | | 75-71-8 | 16.5 | NE | **3.2** | **3.1** | **2.9** | **2.6** | **2.8** | **2** | **2.7** | **2.8** | **2.9** | **3.3** |
| 1,1-Dichloroethane | | 75-34-3 | <0.7 | NE | 0.32 U | 0.32 U | 0.81 U | 0.32 U | 0.32 U | 0.32 U | **10** | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloroethane | | 107-06-2 | <0.9 | NE | **0.25 J** | 0.32 U | 0.81 U | **0.077 J** | **0.079 J** | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,1-Dichloroethene | | 75-35-4 | <1.4 | NE | 0.16 U | 0.16 U | 0.4 U | 0.16 U | 0.16 U | 0.16 U | **0.083 J** | 0.16 U | 0.16 U | 0.16 U |
| cis-1,2-Dichloroethene | | 156-59-2 | <1.9 | NE | 0.16 U | 0.16 U | 0.4 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NE | NE | 0.32 U | 0.32 U | 0.79 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U | 0.32 U |
| 1,2-Dichloropropane | | 78-87-5 | <1.6 | NE | 0.37 U | 0.37 U | 0.92 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U | 0.37 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | <2.3 | NE | 0.36 U | 0.36 U | 0.91 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | <1.3 | NE | 0.36 U | 0.36 U | 0.91 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U | 0.36 U |
| 1,4-Dioxane | | 123-91-1 | NE | NE | 0.72 U | 0.72 U | 1.8 U | 0.72 U | 0.72 U | 0.72 U | **1.7 C** | 0.72 U | 0.72 U | 0.72 U |
| n-Dodecane (C12) | | 112-40-3 | 15.9 | NE | **0.23 J** | 2.8 U | **4.2 J** | 2.8 U | 2.8 U | **0.91 J** | **1.3 J** | **0.83 J** | **0.92 J** | 2.8 U |
| Ethanol | | 64-17-5 | 210 | NE | **120** | **9.6** | **160** | **15** | **11** | **150** | **130** | **6.2** | **14** | **5.4** |
| Ethyl acetate | | 141-78-6 | 5.4 | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Ethyltoluene (p-Ethyltoluene) | | 622-96-8 | 3.6 | NE | **0.43 J** | 0.79 U | 2 U | 0.79 U | **0.13 J** | **2.4 CI** | **2.5 CI** | 0.79 U | 0.79 U | 0.79 U |
| n-Heptane (C7) | | 142-82-5 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| Building | | | | | Building 12 | | Storage and Service Building (Building 19) | | Storage and Service Building (Building 19) | Welding Shop (Building 18) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Matrix | | | | | Indoor Air | Outdoor Air | Soil Vapor | Indoor Air | Outdoor Air | Soil Vapor | | Indoor Air | | Outdoor Air |
| Sample Name | | | | | GPEC-IA 308 | GPEC-OA BLDG 12 | GPEC-SV 333 | GPEC-IA 333 | GPEC-OA SANDS | GPEC-SV323 | GPEC-SV324 | GPEC-IA323 | GPEC-IA324 | GPEC-OAWELD |
| Sample Date | | | | | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/27/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 | 3/18/2018 |
| Parent Sample | | | | | | | | | | | | | | |
| Analyte | Units | CAS No. | EPA BASE Indoor Air Concentrations 90th Percentile Range[1] | NYSDOH Air Guideline Values | | | | | | | | | | |
| 1-Heptene | | 592-76-7 | NE | NE | **1** | **0.36 J** | **0.87 J** | **1.3** | **0.37 J** | **0.87** | **0.63 J** | **0.2 J** | **0.32 J** | **0.23 J** |
| 1,3-Hexachlorobutadiene (C-46) | | 87-68-3 | <6.8 | NE | 0.85 U | 0.85 U | 2.1 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U | 0.85 U |
| n-Hexane (C6) | | 110-54-3 | 10.2 | NE | **1.8** | **0.45 J** | **0.64 J** | **0.58 J** | **0.51 J** | **0.93** | **0.56 J** | **0.46 J** | **0.77** | **0.42 J** |
| 2-Hexanone | | 591-78-6 | NE | NE | 0.82 U | **0.25 J** | 2 U | **0.3 J** | **0.31 J** | **0.3 J** | **0.42 J** | 0.82 U | **0.11 J** | 0.82 U |
| Indane | | 496-11-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indene | | 95-13-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Isopropylbenzene | | 98-82-8 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl ethyl ketone (2-Butanone) | | 78-93-3 | 12 | NE | **1.1** | **1.9** | **5.9** | **1.8** | **2** | **16** | **27** | **0.59 J** | **0.89 J** | **0.52 J** |
| Methyl tert-butyl ether (MTBE) | | 1634-04-4 | 11.5 | NE | 0.58 U | 0.58 U | 1.4 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U | 0.58 U |
| 4-Methyl-2-pentanone (MIBK) | | 108-10-1 | 6 | NE | **0.45 J** | 0.82 U | **1.3 J** | **0.85** | 0.82 U | **2.3** | **0.6 J** | **0.33 J** | **0.64 J** | 0.82 U |
| Methylene chloride | | 75-09-2 | 10 | 60 | **1.5** | **0.92** | **2.8** | **0.94** | **0.89** | **1.2** | **0.82** | **1.1** | **2.9** | **0.91** |
| 1-Methylnaphthalene | | 90-12-0 | NE | NE | 5.8 U* | 5.8 U* | 15 U* | 5.8 U* | 5.8 U* | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 2-Methylnaphthalene | | 91-57-6 | NE | NE | 5.8 U* | 5.8 U* | 15 U* | 5.8 U* | 5.8 U* | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| Naphthalene | | 91-20-3 | 5.1 | NE | 1 U | 1 U | 2.6 U | **0.48 J** | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| n-Nonane (C9) | | 111-84-2 | 7.8 | NE | **0.64 J** | **0.31 J** | **0.44 J** | **0.26 J** | **0.33 J** | **1.5** | **1.4** | **0.15 J** | **0.19 J** | **0.18 J** |
| n-Octane (C8) | | 111-65-9 | 4.5 | NE | **0.37 J** | **0.15 J** | **2.4** | **0.19 J** | **0.19 J** | **40** | **2.3** | **0.15 J** | **0.19 J** | **0.19 J** |
| Pentane | | 109-66-0 | NE | NE | **3** | **1 J** | 3 U | **1.3** | **1.1 J** | **1.4** | 1.2 U | **1.2** | **1.4** | **1 J** |
| 2-Propanol (Isopropyl Alcohol) | | 67-63-0 | 250 | NE | **4.4** | **1.8 J** | **7.5** | **2.3 *** | **2.2 *** | **46** | **85** | **12** | **8.7** | **0.56 J** |
| Propene | | 115-07-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Styrene | | 100-42-5 | 1.9 | NE | 0.34 U | 0.34 U | 0.85 U | 0.34 U | 0.34 U | **0.58** | **0.55** | **0.55** | **0.51** | 0.34 U |
| 1,1,1,2-Tetrachloroethane | | 630-20-6 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NE | NE | 0.55 U | 0.55 U | 1.4 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U | 0.55 U |
| Tetrachloroethene (PCE) | | 127-18-4 | 15.9 | 30 | **0.69** | **0.51 J** | **0.85 J** | **0.45 J** | **0.54** | **2.5** | **1.7** | 0.54 U | 0.54 U | **0.11 J** |
| Tetrahydrofuran | | 109-99-9 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4-Tetramethylbenzene | | 488-23-3 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,5-Tetramethylbenzene | | 527-53-7 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Thiophene | | 110-02-1 | NE | NE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113) | | 76-13-1 | NE | NE | **0.59 J** | **0.61** | **0.52 J** | **0.52 J** | **0.52 J** | **0.58 J** | **0.68** | **0.57 J** | **0.57 J** | **0.63** |
| 1,2,4-Trichlorobenzene | | 120-82-1 | <6.8 | NE | 0.59 U | 0.59 U | 1.5 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U | 0.59 U |
| 1,1,1-Trichloroethane (TCA) | | 71-55-6 | 20.6 | NE | **0.23 J** | 0.44 U | **1.7** | 0.44 U | 0.44 U | **19 B** | **520** | 0.44 U | 0.44 U | 0.44 U |
| 1,1,2-Trichloroethane | | 79-00-5 | <1.5 | NE | 0.44 U | 0.44 U | 1.1 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U | 0.44 U |
| Trichloroethene (TCE) | | 79-01-6 | 4.2 | 2 | **0.2** | 0.19 U | 0.48 U | 0.19 U | **0.089 J** | 0.19 U | **0.32** | 0.19 U | 0.19 U | 0.19 U |
| Trichlorofluoromethane (Freon 11) | | 75-69-4 | 18.1 | NE | **1.8** | **1.7** | **1.6** | **1.3** | **1.4** | **4.4** | **2.3** | **1.5** | **1.8** | **1.8** |
| 1,2,3-Trimethylbenzene | | 526-73-8 | NE | NE | **0.37 J** | 0.39 U | **1.9** | 0.39 U | 0.39 U | **3** | **3.5** | 0.39 U | 0.39 U | 0.39 U |
| 1,2,4-Trimethylbenzene | | 95-63-6 | 9.5 | NE | **1.2** | **0.33 J** | **1.1** | **0.22 J** | **0.26 J** | **2** | **2.5** | **0.19 J** | **0.27 J** | **0.13 J** |
| 1,3,5-Trimethylbenzene | | 108-67-8 | 3.7 | NE | **0.39 J** | 0.39 U | 0.98 U | 0.39 U | 0.39 U | **0.59** | **0.58** | 0.39 U | 0.39 U | 0.39 U |
| 2,2,4-Trimethylpentane (iso-Octane) | | 540-84-1 | NE | NE | **1.2** | **0.33 J** | **0.74 J** | **0.31 J** | **0.34 J** | **0.53 J** | **0.61 J** | **0.17 J** | **0.24 J** | **0.17 J** |
| n-Undecane (C11) | | 1120-21-4 | 22.6 | NE | **0.78 J** | **0.3 J** | **2.1 J** | **0.33 J** | **0.23 J** | **1.4 J** | **2.2 J** | **0.17 J** | **0.19 J** | **0.27 J** |
| Vinyl bromide (Bromoethene) | | 593-60-2 | NE | NE | 0.35 U | 0.35 U | 0.87 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | <1.9 | NE | 0.1 U | 0.1 U | 0.26 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |

**Table 17. Soil Vapor Intrusion Investigation Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

**Notes:**

$\mu g/m^3$ = micrograms per cubic meter

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
VOC = Volatile Organic Compound

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant

Bolding indicates a detected result concentration

**Data Qualifiers:**

* = The duplicate result was not within control limits.
B = The analyte was detected in the associated method blank.
C = The analyte may be biased high.
CI = The peak identified by the data system exhibited chromatographic interference that could not be resolved. There is reason to suspect there may be a high bias.
J = The result is an estimated value.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

(1) Source: NYSDOH, October 2006. USEPA 2001: Building Assessment and Survey Evaluation (BASE) Database from public and commercial office buildings throughout the US from 1994-1996 as presented in Table C2.

NYSDOH - New York State Department of Health
NE - not established
Coloring indicates that the detected concentration is above the USEPA BASE 90th % Value to which it was compared (Indoor Air only).
Shading indicates that the detected concentration is above the NYSDOH Air Guideline Value for Indoor or Outdoor Air

**Table 18. Forensic NAPL Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Report**
**Greenpoint, New York**

| | | Location Name | GPEC-SB01B/MW-1 | GPEC-SB205/MW205 |
|---|---|---|---|---|
| | | Sample Name | GPEC-MW1R | GPEC-MW205 |
| | | Sample Date | 1/10/2013 | 1/10/2013 |
| Analyte | Units | CAS no. | | |
| **NYSDEC PAH17** | mg/kg | | | |
| Acenaphthene | | 83-32-9 | **1370** | **12800 D** |
| Acenaphthylene | | 208-96-8 | **10700** | **2930** |
| Anthracene | | 120-12-7 | **5160** | **5950** |
| Benzo(a)anthracene | | 56-55-3 | **2440** | **3020** |
| Benzo(b)fluoranthene | | 205-99-2 | **832** | **1060** |
| Benzo(k)fluoranthene | | 207-08-9 | **1120** | **1350** |
| Benzo(g,h,i)perylene | | 191-24-2 | **915** | **1140** |
| Benzo(a)pyrene | | 50-32-8 | **2400** | **2900** |
| Chrysene | | 218-01-9 | **2080** | **2650** |
| Dibenz(a,h)anthracene | | 53-70-3 | **212** | **280** |
| Fluoranthene | | 206-44-0 | **4520** | **5220** |
| Fluorene | | 86-73-7 | **4770** | **5340** |
| Indeno(1,2,3-cd)pyrene | | 193-39-5 | **678** | **850** |
| 2-Methylnaphthalene | | 91-57-6 | **45600 D** | **33400 D** |
| Naphthalene | | 91-20-3 | **75800 D** | **62500 D** |
| Phenanthrene | | 85-01-8 | **21500 D** | **21600 D** |
| Pyrene | | 129-00-0 | **8140** | **10200 D** |
| Total PAH (17) (ND=0) | | TPAH17_ND0 | **188237** | **173190** |
| **NYSDEC PAH17 Other SVOCs** | mg/kg | | | |
| Benzo(b)naphtho(2,1-d)thiophene | | 239-35-0 | **262** | **426** |
| Benzo(e)pyrene | | 192-97-2 | **1140** | **1400** |
| Benzothiophene | | 11095-43-5 | **1100** | **1090** |
| C1-Benzo(b)thiophenes | | BENbTHPHC1 | **1100** | **1250** |
| C2-Benzo(b)thiophenes | | BENbTHPHC2 | **1220** | **1450** |
| C3-Benzo(b)thiophenes | | BENbTHPHC3 | **523** | **666** |
| C4-Benzo(b)thiophenes | | BENbTHPHC4 | **181** | **265** |
| C1-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC1 | **1760** | **2540** |
| C2-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC2 | **797** | **1290** |
| C3-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC3 | **302** | **577** |
| C4-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC4 | **96.8** | **233** |
| cis-Decalin | | 493-01-6 | 5.68 U | 4.27 U |
| trans-Decalin | | 493-02-7 | **41** | **49.8** |
| C1-Decalins | | DECLC1 | **132** | **160** |
| C2-Decalins | | DECLC2 | **168** | **208** |
| C3-Decalins | | DECLC3 | **133** | **143** |
| C4-Decalins | | DECLC4 | **179** | **190** |
| Dibenzofuran | | 132-64-9 | **1090** | **1170** |
| Dibenzothiophene | | 132-65-0 | **1390** | **1700** |
| C1-Dibenzothiophenes | | DIBENTHPHC1 | **1040** | **1390** |
| C2-Dibenzothiophenes | | DIBENTHPHC2 | **854** | **1300** |
| C3-Dibenzothiophenes | | DIBENTHPHC3 | **339** | **562** |
| C4-Dibenzothiophenes | | DIBENTHPHC4 | **121** | **199** |
| 2,6-Dimethylnaphthalene | | 581-42-0 | **14200 D** | **13500 D** |
| C1-Fluoranthenes/pyrenes | | FLUORTHPYRC1 | **6900** | **8680** |
| C2-Fluoranthenes/pyrenes | | FLUORTHPYRC2 | **2080** | **3120** |
| C3-Fluoranthenes/pyrenes | | FLUORTHPYRC3 | **715** | **1060** |
| C1-Fluorenes | | FLUORC1 | **3460** | **3870** |
| C2-Fluorenes | | FLUORC2 | **1850** | **2350** |
| C3-Fluorenes | | FLUORC3 | **765** | **1140** |
| 1-Methylnaphthalene | | 90-12-0 | **23200 D** | **22300 D** |
| 1-Methylphenanthrene | | 832-69-9 | **2650** | **3150** |
| C1-Naphthalenes | | NAPHC1 | **30400** | **27600** |
| C2-Naphthalenes | | NAPHC2 | **19100** | **21700** |
| C3-Naphthalenes | | NAPHC3 | **7730** | **8770** |
| C4-Naphthalenes | | NAPHC4 | **2230** | **2620** |
| Perylene | | 198-55-0 | **334** | **430** |
| C1-Phenanthrenes/anthracenes | | PHENANTHC1 | **10800** | **12700** |
| C2-Phenanthrenes/anthracenes | | PHENANTHC2 | **4130** | **5340** |
| C3-Phenanthrenes/anthracenes | | PHENANTHC3 | **1390** | **1970** |
| C4-Phenanthrenes/anthracenes | | PHENANTHC4 | **291** | **680** |
| Retene | | 483-65-8 | 5.68 U | 4.27 U |
| 1,6,7-Trimethylnaphthalene | | 2245-38-7 | **1900** | **2160** |
| **n-Alkanes and Isoprenoids** | mg/kg | | | |
| n-Decane (C10) | | 124-18-5 | **216** | **250** |
| n-Docosane (C22) | | 629-97-0 | **86.6** | **31.4 J** |
| n-Dodecane (C12) | | 112-40-3 | **414** | **474** |
| n-Dotriacontane (C32) | | 544-85-4 | **206** | **156** |
| n-Eicosane (C20) | | 112-95-8 | **246** | **91** |
| n-Heneicosane (C21) | | 629-94-7 | **166** | **64.8** |
| n-Hentriacontane (C31) | | 630-04-6 | **179** | **134** |
| n-Heptacosane (C27) | | 593-49-7 | **86.1** | **56.3** |
| n-Heptadecane (C17) | | 629-78-7 | **523** | **230** |
| n-Heptatriacontane (C37) | | 7194-84-5 | 56.8 U | 42.7 U |
| n-Hexacosane (C26) | | 630-01-3 | **65.9** | **42.1 J** |
| n-Hexadecane (C16) | | 544-76-3 | **736** | **497** |
| n-Hexatriacontane (C36) | | 630-06-8 | 56.8 U | 42.7 U |
| n-Nonacosane (C29) | | 630-03-5 | **144** | **106** |
| n-Nonadecane (C19) | | 629-92-5 | **408** | **143** |
| n-Nonatriacontane (C39) | | 7194-86-7 | 56.8 U | 42.7 U |
| n-Nonane (C9) | | 111-84-2 | 56.8 U | 42.7 U |
| n-Octacosane (C28) | | 630-02-4 | **115** | **83.3** |

**Table 18. Forensic NAPL Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Report**
**Greenpoint, New York**

| | | Location Name<br>Sample Name<br>Sample Date | GPEC-SB01B/MW-1<br>GPEC-MW1R<br>1/10/2013 | GPEC-SB205/MW205<br>GPEC-MW205<br>1/10/2013 |
|---|---|---|---|---|
| Analyte | Units | CAS no. | | |
| n-Octadecane (C18) | | 593-45-3 | **418** | **159** |
| n-Octane (C10) | | 111-65-9 | 56.8 U | 42.7 U |
| n-Octatriacontane (C38) | | 7194-85-6 | 56.8 U | 42.7 U |
| n-Pentacosane (C25) | | 629-99-2 | 56.8 U | 42.7 U |
| n-Pentadecane (C15) | | 629-62-9 | **579** | **392** |
| n-Pentatriacontane (C35) | | 630-07-9 | 56.8 U | 42.7 U |
| Phytane (C20) | | 638-36-8 | **260** | **334** |
| Pristane (C19) | | 1921-70-6 | **348** | **434** |
| n-Tetracontane (C40) | | 4181-95-7 | 56.8 U | 42.7 U |
| n-Tetracosane (C24) | | 646-31-1 | 56.8 U | 42.7 U |
| n-Tetradecane | | 629-59-4 | **565** | **466** |
| n-Tetratriacontane (C34) | | 14167-59-0 | 56.8 U | **172** |
| n-Triacontane (C30) | | 638-68-6 | **160** | **120** |
| n-Tricosane (C23) | | 638-67-5 | **47.8 J** | 42.7 U |
| n-Tridecane (C13) | | 629-50-5 | **609** | **624** |
| 2,6,10-Trimethyldodecane (C15) | | 3891-98-3 | **55.6 J** | **63.3** |
| 2,6,10-Trimethylpentadecane (C18) | | 3892-00-0 | **202** | **261** |
| 2,6,10-Trimethyltridecane (C16) | | 3891-99-4 | 56.8 U | **332** |
| n-Tritriacontane (C33) | | 630-05-7 | 56.8 U | **169** |
| n-Undecane (C11) | | 1120-21-4 | **370** | **419** |
| **Biomarkers** | mg/kg | | | |
| C23 Tricyclic Terpane (T4) | | T4 | **4.18** | **6.01** |
| C24 Tricyclic Terpane (T5) | | T5 | **2.63 J** | **3.38 J** |
| C25 Tricyclic terpane-22S/R (T6) | | T6 | **2.78 J** | **3.36 J** |
| C24 Tetracyclic Terpane (T6a) | | T6a | **3.48 J** | **4.23** |
| C26 Tricyclic Terpane-22S (T6b) | | T6b | 3.95 U | 3.57 U |
| C26 Tricyclic Terpane-22R (T6c) | | T6c | 3.95 U | 3.57 U |
| C28 Tricyclic Terpane-22S (T7) | | T7 | 3.95 U | 3.57 U |
| C28 Tricyclic Terpane-22R (T8) | | T8 | 3.95 U | 3.57 U |
| C29 Tricyclic Terpane-22S (T9) | | T9 | 3.95 U | 3.57 U |
| C29 Tricyclic Terpane-22R (T10) | | T10 | 3.95 U | 3.57 U |
| 18a(H)-22,29,30-Trisnomeohopane-TS (T11) | | T11 | **10.8** | **15** |
| 17a(H)-22,29,30-Trisnorhopane-TM (T12) | | T12 | **7.14** | **9.49** |
| 17a(H)-21b(H)/17b(H),21a(H)-28,30-Bisnorhopane (T14a) | | T14a | 3.95 U | 3.57 U |
| 17a(H)-21b(H)-25-Norhopane (TI4b) | | TI4b | 3.95 U | 3.57 U |
| 30-Norhopane (T15) | | T15 | **21.7** | **27.3** |
| 18a(H)-30-Norneohopane -C29Ts (T16) | | T16 | **10.3** | **13** |
| 17a(H)-Diahopane (X) | | X | **2.27 J** | 3.57 U |
| 30-Normoretane (T17) | | T17 | 3.95 U | **6.81** |
| 18a(H)/18b(H)-Oleananes (TI8) | | TI8 | **4.7** | **6.48** |
| Hopane (T19) | | T19 | **36.3** | **47.8** |
| Moretane (T20) | | T20 | **5.63** | **4.7** |
| 30-Homohopane-22S (T21) | | T21 | **10.3** | **9.32** |
| 30-Homohopane-22R (T22) | | T22 | **7.78** | **9.48** |
| 30,31-Bishomohopane-22S (T26) | | T26 | **7.58** | **6.05** |
| 30,31-Bishomohopane-22R (T27) | | T27 | **6.88** | **4.18** |
| 30,31-Trishomohopane-22S (T30) | | T30 | 3.95 U | **3.24 J** |
| 30,31-Trishomohopane-22R (T31) | | T31 | 3.95 U | 3.57 U |
| Tetrakishomohopane-22S (T32) | | T32 | 3.95 U | 3.57 U |
| Tetrakishomohopane-22R (T33) | | T33 | 3.95 U | 3.57 U |
| Pentakishomohopane-22S (T34) | | T34 | 3.95 U | 3.57 U |
| Pentakishomohopane-22S (T35) | | T35 | 3.95 U | 3.57 U |
| 13b(H),17a(H)-20S-Diacholestane (S4) | | S4 | **4.17** | **4.38** |
| 13b(H),17a(H)-20R-Diacholestane (S5) | | S5 | **2.32 J** | **2.1 J** |
| 13b(H),17a(H)-20S-Methyldiacholestane (S8) | | S8 | **2.24 J** | **2.31 J** |
| 14a(H),17a(H)-20S-Cholestane (S12) | | S12 | **4.74** | **5.55** |
| 14a(H),17a(H)-20R-Cholestane (S17) | | S17 | **5.39** | **6.11** |
| 13b(H),17a(H)-20R-Ethyldiacholestane (S18) | | S18 | 3.95 U | 3.57 U |
| 13a(H),17b(H)-20S-Ethyldiacholestane (S19) | | S19 | 3.95 U | 3.57 U |
| 14a(H),17a(H)-20S-Methylcholestane (S20) | | S20 | **3.45 J** | **3.07 J** |
| 14a(H),17a(H)-20R-Methylcholestane (S24) | | S24 | **2.73 J** | **2.8 J** |
| 14a(H),17a(H)-20S-Ethlylcholestane (S25) | | S25 | **2.15 J** | **1.89 J** |
| 14a(H),17a(H)-20R-Ethylcholestane (S28) | | S28 | **2.42 J** | **2.95 J** |
| 14b(H),17b(H)-20R-Cholestane (S14) | | S14 | **2.58 J** | **2.86 J** |
| 14b(H),17b(H)-20S-Cholestane (S15) | | S15 | **3.05 J** | **2.87 J** |
| 14b(H),17b(H)-20R-Methylcholestane (S22) | | S22 | **2.69 J** | **2.89 J** |
| 14b(H),17b(H)-20R-Ethylcholestane (S26) | | S26 | **3.82 J** | **3.21 J** |
| 14b(H),17b(H)-20S-Ethylcholestane (S27) | | S27 | **2.46 J** | **3.41 J** |
| **Other** | mg/kg | | | |
| Total Petroleum Hydrocarbons | | TPH | **867000 B** | **899000 B** |
| Diesel Range Organics | | DRO | **681000 B** | **682000 B** |

**Notes:**

mg/kg - milligrams/kilogram or parts per million (ppm)
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
NYSDEC - New York State Department of Environmental Conservation
Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

Bolding indicates a detected concentration

**Laboratory Qualifiers:**

B - Analyte detected in the associated method blank
D - Results for dilution
J - estimated value
U - indicates not detected at or above the reporting limit shown.

**Table 18. Forensic NAPL Analytial Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Report**
**Greenpoint, New York**

**Notes:**

mg/kg - milligrams/kilogram or parts per million (ppm)
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
NYSDEC - New York State Department of Environmental Conservation
Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

Bolding indicates a detected concentration

**Laboratory Qualifiers:**

B - Analyte detected in the associated method blank
D - Results for dilution
J - estimated value
U - indicates not detected at or above the reporting limit shown.

**Table 19. Forensic Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB203 | GPEC-SB204 | GPEC-SB205/MW205 | GPEC-SB205/MW205 | GPEC-SB206 | GPEC-SB206 | GPEC-SB207 | GPEC-SB207 | GPEC-SB208 | GPEC-SB208 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB203 (29-30) | GPEC-SB204 (19-20) | GPEC-SB205 (34-35) | GPEC-SB205 (71-72) | GPEC-SB206 (30-32) | GPEC-SB206 (69-70) | GPEC-SB207 (36-37) | GPEC-SB207 (75.5-77) | GPEC-SB208-1 (29-30) | GPEC-SB208-2 (29-30) |
| | | Start Depth | 29 | 19 | 34 | 71 | 30 | 69 | 36 | 75.5 | 29 | 29 |
| | | End Depth | 30 | 20 | 35 | 72 | 32 | 70 | 37 | 77 | 30 | 30 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 7/11/2012 | 7/11/2012 | 7/2/2012 | 7/2/2012 | 6/27/2012 | 6/27/2012 | 6/26/2012 | 6/26/2012 | 7/10/2012 | 7/10/2012 |
| | | Parent Sample Code | | | | | | | | | | |
| Analyte | Unit | CAS no. | | | | | | | | | | |
| **NYSDEC PAH17** | mg/kg | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | **131 D** | **0.012 J** | **64.8** | **627 B** | **511** | **79.1** | **166** | NA | **40.8 B** | **83.3** |
| Acenaphthylene | | 208-96-8 | **17** | **0.011 J** | **30.5** | **133** | **81** | **14.2** | **20.3** | NA | **4.43** | **7.6** |
| Anthracene | | 120-12-7 | **46 D** | **0.015 J** | **31.9** | **351 B** | **241** | **45.8** | **85.6** | NA | **18.6 B** | **34.4** |
| Benzo(a)anthracene | | 56-55-3 | **22.7** | 0.015 U | **17.4** | **166 B** | **96.7** | **22.2** | **34.2** | NA | **8.47 B** | **14.6** |
| Benzo(b)fluoranthene | | 205-99-2 | **8.41** | 0.015 U | **5.9** | **53 B** | **29.5** | **7.65** | **9.59** | NA | **2.43 B** | **4.23** |
| Benzo(k)fluoranthene | | 207-08-9 | **10.1** | 0.015 U | **7.32 B** | **79.6 B** | **41.2** | **10.5** | **13.2** | NA | **2.75 B** | **4.77** |
| Benzo(g,h,i)perylene | | 191-24-2 | **6.8** | 0.015 U | **4.46 B** | **58 B** | **22.3** | **8.17** | **7.46** | NA | **2.39 B** | **3.06** |
| Benzo(a)pyrene | | 50-32-8 | **18.8** | 0.015 U | **13.3** | **153 B** | **77.9** | **21.6** | **25.9** | NA | **6.14 B** | **105** |
| Chrysene | | 218-01-9 | **20.1** | **0.015 J** | **15.8** | **147 B** | **84.9** | **19.1** | **31** | NA | **7.95 B** | **13.5** |
| Dibenz(a,h)anthracene | | 53-70-3 | **2.56 B** | 0.015 BU | **1.75 B** | **15.4 B** | **7.87** | **2.47** | **2.69** | NA | **0.889 B** | **1.34 B** |
| Fluoranthene | | 206-44-0 | **40** | **0.016** | **29.7** | **307 B** | **176** | **39.4** | **57.1** | NA | **14 B** | **23.1** |
| Fluorene | | 86-73-7 | **40.3** | **0.03** | **19.1** | **290 B** | **222** | **38.6** | **63.1** | NA | **14.3 B** | **31** |
| Indeno(1,2,3-cd)pyrene | | 193-39-5 | **6.53 B** | 0.015 BU | **4.07 B** | **47.8 B** | **21.1** | **7.01** | **6.7** | NA | **2.17 B** | **2.72 B** |
| 2-Methylnaphthalene | | 91-57-6 | **120 D** | **0.016** | **54.3** | **1320** | **1240 D** | **22** | **59** | NA | **57.7** | **117** |
| Naphthalene | | 91-20-3 | **220 D** | **0.04** | **84.6** | **2660 B** | **1390 DB** | **332 DB** | **57.4 B** | NA | **88.8 B** | **161** |
| Phenanthrene | | 85-01-8 | **119 DB** | **0.043** | **84** | **1010 B** | **595** | **123** | **208** | NA | **51 B** | **92.6 B** |
| Pyrene | | 129-00-0 | **50.8 D** | **0.016** | **39.3** | **560 B** | **269** | **68.6** | **94.8** | NA | **22.6 B** | **37.6** |
| Total PAH (17) (ND=0) | | TPAH17_ND0 | **880.1** | **0.214** | **508.2** | **7977.8** | **5106.47** | **861.4** | **942.04** | NA | **345.419** | **736.82** |
| **NYSDEC PAH17 Other SVOCs** | mg/kg | | | | | | | | | | | |
| Benzo(b)naphtho(2,1-d)thiophene | | 239-35-0 | **3.31** | 0.015 U | **2.64** | **23.2** | **11.3** | **3.18** | **5.65** | NA | **1.59** | **2.8** |
| Benzo(e)pyrene | | 192-97-2 | **9.57** | 0.015 U | **7.24** | **80.5 B** | **35.5** | **10.8** | **12.7** | NA | **3.32 B** | **5.31** |
| Benzothiophene | | 11095-43-5 | **4.4** | 0.015 U | **3.8** | **51** | **28.8** | **6.84** | **3.16** | NA | **2.62** | **1.46** |
| C1-Benzo(b)thiophenes | | BENbTHPHC1 | **12.9** | 0.015 U | **8.58** | **59** | **49.9** | **6.62** | **16.3** | NA | **5.13** | **9.35** |
| C2-Benzo(b)thiophenes | | BENbTHPHC2 | **12.2** | 0.015 U | **7.29** | **63.9** | **54.9** | **8.19** | **24.6** | NA | **6.23** | **11** |
| C3-Benzo(b)thiophenes | | BENbTHPHC3 | **5.66** | 0.015 U | **3.59** | **31.5** | **27.9** | **4.28** | **12.2** | NA | **2.86** | **4.97** |
| C4-Benzo(b)thiophenes | | BENbTHPHC4 | **2.01** | 0.015 U | **1.53** | **11.6** | **9.88** | **1.48** | **4.03** | NA | **0.998** | **1.77** |
| C1-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC1 | **23** | **0.011 J** | **20.6** | **123** | **85** | **18** | **32.8** | NA | **9.6** | **16.2** |
| C2-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC2 | **13.5** | 0.015 U | **12.7** | **59.1** | **43.6** | **7.54** | **17** | NA | **5.13** | **9.19** |
| C3-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC3 | **7.64** | **0.032** | **7.62** | **24.8** | **20.5** | **3.38** | **7.87** | NA | **2.29** | **4.74** |
| C4-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC4 | **3.64** | **0.132** | **3.68** | **14.6** | **9.96** | **1.33** | **3.3** | NA | **1.35** | **2.48** |
| cis-Decalin | | 493-01-6 | **0.267** | 0.015 U | **0.228** | 1.7 U | **0.663** | **0.025 J** | **0.168** | NA | 0.124 U | **0.095 J** |
| trans-Decalin | | 493-02-7 | **2.52** | 0.015 U | **1.97** | **2.4** | **6.28** | **0.221** | **1.32** | NA | **0.475** | **0.811** |
| C1-Decalins | | DECLC1 | **7.3** | 0.015 U | **5.54** | **6.7** | **19.5** | **0.594** | **3.95** | NA | **1.25** | **2.27** |
| C2-Decalins | | DECLC2 | **7.35** | 0.015 U | **7.39** | **11.8** | **22.4** | **0.923** | **6.14** | NA | **1.89** | **2.98** |
| C3-Decalins | | DECLC3 | **2.78** | 0.015 U | **2.5** | 1.7 U | **9.24** | **0.453** | **2.22** | NA | **0.974** | **1.39** |
| C4-Decalins | | DECLC4 | **4.25** | 0.015 U | **3.97** | **21.9** | **14.4** | **2.29** | **4.1** | NA | 0.124 U | **1.97** |
| Dibenzofuran | | 132-64-9 | **7.78** | 0.015 U | **5.24** | **51.8 B** | **29.1** | **7.98** | **7.02** | NA | **1.83 B** | **4.31** |
| Dibenzothiophene | | 132-65-0 | **11.1** | 0.015 U | **7.2** | **97.5 B** | **55.6** | **13.2** | **26.7** | NA | **6.56 B** | **11.9** |
| C1-Dibenzothiophenes | | DIBENTHPHC1 | **13.1** | **0.126** | **9.29** | **102** | **61.9** | **14.2** | **34.8** | NA | **9.21** | **16.2** |
| C2-Dibenzothiophenes | | DIBENTHPHC2 | **10** | 0.015 U | **7.51** | **69.1** | **41.1** | **10.1** | **24.3** | NA | **6.96** | **11.9** |
| C3-Dibenzothiophenes | | DIBENTHPHC3 | **5.7** | 0.015 U | **4.8** | **29.1** | **19** | **4.05** | **9.97** | NA | **3** | **5.47** |
| C4-Dibenzothiophenes | | DIBENTHPHC4 | **3.16** | 0.015 U | **2.59** | **10.3** | **7.47** | **1.35** | **3.6** | NA | **1.33** | **2.4** |
| 2,6-Dimethylnaphthalene | | 581-42-0 | **97.4 D** | 0.015 U | **53.3** | **657** | **368 D** | **78.5 D** | **139 E** | NA | **32.6** | **69.3** |
| C1-Fluoranthenes/pyrenes | | FLUORTHPYRC1 | **50.1 D** | **0.036** | **40** | **412** | **254** | **59.4** | **101** | NA | **24** | **41.9** |
| C2-Fluoranthenes/pyrenes | | FLUORTHPYRC2 | **22.2** | **0.039** | **16.9** | **140** | **86.6** | **19.5** | **36.9** | NA | **9.92** | **17.6** |
| C3-Fluoranthenes/pyrenes | | FLUORTHPYRC3 | **10.6** | **0.025** | **10.6** | **46.5** | **34** | **6.64** | **14.2** | NA | **4.4** | **7.58** |
| C1-Fluorenes | | FLUORC1 | **33.2** | **0.023** | **20.3** | **221** | **178** | **31.7** | **62.3** | NA | **14.4** | **28** |
| C2-Fluorenes | | FLUORC2 | **13.5** | **0.016** | **13.8** | **120** | **92.4** | **17.1** | **38.8** | NA | **8.37** | **17.2** |
| C3-Fluorenes | | FLUORC3 | **6.96** | **0.02** | **6.05** | **44.9** | **29.6** | **6.79** | **12.2** | NA | **3.6** | **7.84** |
| 1-Methylnaphthalene | | 90-12-0 | **255 D** | **0.022** | **197** | **1010** | **856** | **117** | **236** | NA | **61.1** | **113** |
| 1-Methylphenanthrene | | 832-69-9 | **27.4 D** | 0.015 U | **16.1** | **179** | **112 B** | **22.8 B** | **46.1 B** | NA | **11.8** | **23.3** |
| C1-Naphthalenes | | NAPHC1 | **223 D** | **0.026** | **154** | **1450** | **1270 D** | **85.4** | **181** | NA | **74** | **137** |
| C2-Naphthalenes | | NAPHC2 | **163 D** | **0.03** | **109** | **1160** | **836** | **149** | **274** | NA | **64.7** | **116** |
| C3-Naphthalenes | | NAPHC3 | **43.9 D** | **0.019** | **32.4** | **427** | **249** | **60.7** | **100** | NA | **23.5** | **40.7** |
| C4-Naphthalenes | | NAPHC4 | **15.5** | **0.019** | **11.4** | **122** | **71.7** | **16.4** | **26.8** | NA | **6.68** | **11.7** |
| Perylene | | 198-55-0 | **2.51** | 0.015 U | **1.88** | **21.9** | **8.18** | **3.12** | **3.01** | NA | **0.392** | **0.693** |
| C1-Phenanthrenes/anthracenes | | PHENANTHC1 | **77.5 D** | **0.03** | **56.3** | **643** | **382** | **88.1** | **166** | NA | **39.5** | **73.5** |
| C2-Phenanthrenes/anthracenes | | PHENANTHC2 | **33.3** | **0.095** | **26.2** | **269** | **144** | **36.8** | **64.3** | NA | **18** | **31.4** |
| C3-Phenanthrenes/anthracenes | | PHENANTHC3 | **13.5** | **0.017** | **11.5** | **81.3** | **44.5** | **11.5** | **18.8** | NA | **5.86** | **10.7** |
| C4-Phenanthrenes/anthracenes | | PHENANTHC4 | **5.49** | 0.015 U | **5.14** | **20.1** | **15** | **2.75** | **5.9** | NA | **2.06** | **4.29** |
| Retene | | 483-65-8 | **3.68** | 0.015 U | **2.84** | **2.89** | **7.99** | **0.533** | **2.78** | NA | **1.44** | **2.31** |
| 1,6,7-Trimethylnaphthalene | | 2245-38-7 | **8.99** | 0.015 U | **7.52** | **106** | **64.2** | **13.6** | **23.3** | NA | **5.07** | **10.6** |
| **n-Alkanes and Isoprenoids** | mg/kg | | | | | | | | | | | |
| n-Decane (C10) | | 124-18-5 | **2.12** | 0.145 U | **1.93** | **10.3 J** | **42** | **0.651** | **2.06** | NA | **1.49** | **3.57** |
| n-Docosane (C22) | | 629-97-0 | **8.1** | **0.214** | **1.93** | 17 U | **42.2** | 0.424 U | **2.82** | NA | **1.89** | **4.68** |
| n-Dodecane (C12) | | 112-40-3 | **12.8 D** | 0.145 U | **7.82** | **20.9** | **112** | **0.998** | **10.6** | NA | **4.03** | **9.81** |
| n-Dotriacontane (C32) | | 544-85-4 | **1.58** | **0.201** | 0.916 U | 17 U | **5.56** | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| n-Eicosane (C20) | | 112-95-8 | **10.9** | **0.148** | **4.47 B** | 17 U | **57.1** | 0.424 U | **4.93** | NA | **2.74** | **6.69** |
| n-Heneicosane (C21) | | 629-94-7 | **10** | **0.401** | **2.9** | 17 U | **51.1** | 0.424 U | **4.07** | NA | **2.56** | **5.99** |
| n-Hentriacontane (C31) | | 630-04-6 | **3.24** | **0.444** | **1.36** | 17 U | **9.65** | 0.424 U | **1.02** | NA | 1.24 U | **0.871 J** |
| n-Heptacosane (C27) | | 593-49-7 | **3.44** | **0.86** | 0.916 U | 17 U | **17.2** | 0.424 U | **1.03** | NA | 1.24 U | **1.43** |
| n-Heptadecane (C17) | | 629-78-7 | **10.5 B** | **0.11 J** | **3.63** | **8.85 J** | **67.9** | 0.424 U | **4.79** | NA | **2.76** | **6.9 B** |
| n-Heptatriacontane (C37) | | 7194-84-5 | **0.82** | 0.145 U | 0.916 U | 17 U | 2.74 U | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| n-Hexacosane (C26) | | 630-01-3 | **4.14** | **0.316** | 0.916 U | 17 U | **17.7** | 0.424 U | **1.46** | NA | **0.705 J** | **1.98** |
| n-Hexadecane (C16) | | 544-76-3 | **11 DB** | 0.145 U | **4.49** | **21** | **81.9** | 0.424 U | **7.36** | NA | **3.41** | **8.19 B** |
| n-Hexatriacontane (C36) | | 630-06-8 | **0.77** | 0.145 U | 0.916 U | 17 U | 2.74 U | 0.424 U | 1 U | NA | 1.24 U | **4.01** |
| n-Nonacosane (C29) | | 630-03-5 | **3.71** | **0.913** | **1.76** | 17 U | **12.8** | 0.424 U | **1.52** | NA | 1.24 U | **1.98** |
| n-Nonadecane (C19) | | 629-92-5 | **9.45 B** | **0.203** | **3.8 B** | 17 U | **56.2** | 0.424 U | **4.11** | NA | **2.5** | **6.07 B** |
| n-Nonatriacontane (C39) | | 7194-86-7 | 0.111 U | 0.145 U | 0.916 U | 17 U | 2.74 U | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| n-Nonane (C9) | | 111-84-2 | **0.716** | 0.145 U | **0.718 J** | 17 U | **22** | **0.384 J** | **0.935 J** | NA | **1.22 J** | **1.86** |

**Table 19. Forensic Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB203 | GPEC-SB204 | GPEC-SB205/MW205 | GPEC-SB205/MW205 | GPEC-SB206 | GPEC-SB206 | GPEC-SB207 | GPEC-SB207 | GPEC-SB208 | GPEC-SB208 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB203 (29-30) | GPEC-SB204 (19-20) | GPEC-SB205 (34-35) | GPEC-SB205 (71-72) | GPEC-SB206 (30-32) | GPEC-SB206 (69-70) | GPEC-SB207 (36-37) | GPEC-SB207 (75.5-77) | GPEC-SB208-1 (29-30) | GPEC-SB208-2 (29-30) |
| | | Start Depth | 29 | 19 | 34 | 71 | 30 | 69 | 36 | 75.5 | 29 | 29 |
| | | End Depth | 30 | 20 | 35 | 72 | 32 | 70 | 37 | 77 | 30 | 30 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 7/11/2012 | 7/11/2012 | 7/2/2012 | 7/2/2012 | 6/27/2012 | 6/27/2012 | 6/26/2012 | 6/26/2012 | 7/10/2012 | 7/10/2012 |
| | | Parent Sample Code | | | | | | | | | | |
| Analyte | Unit | CAS no. | | | | | | | | | | |
| n-Octacosane (C28) | | 630-02-4 | **3.01** | **0.333** | 0.916 U | 17 U | **13** | 0.424 U | **1.22** | NA | 1.24 U | **1.34** |
| n-Octadecane (C18) | | 593-45-3 | **8.68 B** | **0.124 J** | **2.86 B** | 17 U | **55.5** | 0.424 U | **3.49** | NA | **2.16** | **5.98 B** |
| n-Octane (C10) | | 111-65-9 | **0.426** | 0.145 U | **0.489 J** | 17 U | **9.82** | 0.424 U | **0.585 J** | NA | **0.727 J** | **1.12 J** |
| n-Octatriacontane (C38) | | 7194-85-6 | **0.569** | 0.145 U | 0.916 U | 17 U | 2.74 U | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| n-Pentacosane (C25) | | 629-99-2 | **7.67** | **1.49** | **3.82** | 17 U | **27.8** | 0.424 U | **3.74** | NA | **1.58** | **3.75** |
| n-Pentadecane (C15) | | 629-62-9 | **11.4 D** | 0.145 U | **3.94** | **16.4 J** | **91.4** | 0.424 U | **5.62** | NA | **3.3** | **8.16** |
| n-Pentatriacontane (C35) | | 630-07-9 | **1.87** | 0.145 U | 0.916 U | 17 U | **1.83 J** | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| Phytane (C20) | | 638-36-8 | **11.6 DB** | **0.116 J** | **11.4** | **11.3 J** | **31.7** | **1.62** | **9.22** | NA | **3.03** | **7 B** |
| Pristane (C19) | | 1921-70-6 | **15.3 DB** | 0.145 U | **15.3** | **17.2** | **44.3** | **2.49** | **12.8** | NA | **4.29** | **9.76 B** |
| n-Tetracontane (C40) | | 4181-95-7 | 0.111 U | 0.145 U | 0.916 U | 17 U | 2.74 U | 0.424 U | 1 U | NA | 1.24 U | 1.14 U |
| n-Tetracosane (C24) | | 646-31-1 | **6.46** | **0.304** | 0.916 U | 17 U | **28.3** | 0.424 U | **2.62** | NA | **1.36** | **3.26** |
| n-Tetradecane | | 629-59-4 | **11 D** | **0.082 J** | **4.28** | **20.6** | **97.2** | 0.424 U | **7.14** | NA | **3.29** | **7.77** |
| n-Tetratriacontane (C34) | | 14167-59-0 | **1.98** | 0.145 U | 0.916 U | 17 U | **5.2** | 0.424 U | **0.518 J** | NA | 1.24 U | 1.14 U |
| n-Triacontane (C30) | | 638-68-6 | **2.16** | 0.145 U | 0.916 U | 17 U | **8.77** | 0.424 U | **0.805 J** | NA | 1.24 U | **0.946 J** |
| n-Tricosane (C23) | | 638-67-5 | **6.33** | **0.794** | **1.42** | 17 U | **31.6** | 0.424 U | **2.24** | NA | **1.34** | **3.65** |
| n-Tridecane (C13) | | 629-50-5 | **11.5 D** | 0.145 U | **5.13** | **23.6** | **104** | 0.424 U | **9.86** | NA | **3.6** | **8.89** |
| 2,6,10-Trimethyldodecane (C15) | | 3891-98-3 | **10 D** | 0.145 U | **9.79** | **9.64 J** | **32.4** | **1.07** | **8.14** | NA | **2.42** | 1.14 U |
| 2,6,10-Trimethylpentadecane (C18) | | 3892-00-0 | **12.1 D** | 0.145 U | **13.1** | **10.2 J** | **36.2** | 0.424 U | **9.88** | NA | **3.19** | 1.14 U |
| 2,6,10-Trimethyltridecane (C16) | | 3891-99-4 | **13.5 D** | 0.145 U | **12.1** | **13.7 J** | **44** | **1.88** | **10.5** | NA | **3.25** | 1.14 U |
| n-Tritriacontane (C33) | | 630-05-7 | **3.24** | **0.237** | 0.916 U | 17 U | **5.67** | 0.424 U | **0.806 J** | NA | 1.24 U | 1.14 U |
| n-Undecane (C11) | | 1120-21-4 | **6.07 D** | 0.145 U | **4.3** | **15.9 J** | **84.6** | **0.974** | **5.12** | NA | **2.68** | **7.2** |
| **Biomarkers** | mg/kg | | | | | | | | | | | |
| C23 Tricyclic Terpane (T4) | | T4 | **0.485** | 0.029 U | **0.312** | **0.11** | **0.706** | **0.014** | **0.291** | **0.099** | **0.122** | **0.212** |
| C24 Tricyclic Terpane (T5) | | T5 | **0.337** | 0.029 U | **0.206** | **0.066** | **0.511** | **0.01** | **0.193** | **0.07** | **0.083** | **0.146** |
| C25 Tricyclic terpane-22S/R (T6) | | T6 | **0.289** | 0.029 U | **0.18** | **0.069** | **0.446** | **0.011** | **0.164** | **0.058** | **0.077** | **0.135** |
| C24 Tetracyclic Terpane (T6a) | | T6a | **0.141** | 0.029 U | **0.085** | **0.094** | **0.195** | **0.014** | **0.083** | **0.078** | **0.038** | **0.058** |
| C26 Tricyclic Terpane-22S (T6b) | | T6b | **0.121** | 0.029 U | **0.078** | **0.032** | **0.171** | 0.008 U | **0.069** | **0.03** | **0.041** | **0.053** |
| C26 Tricyclic Terpane-22R (T6c) | | T6c | **0.143** | 0.029 U | **0.084** | **0.032** | **0.176** | **0.006 J** | **0.069** | **0.03** | **0.04** | **0.052** |
| C28 Tricyclic Terpane-22S (T7) | | T7 | **0.174** | 0.029 U | **0.102** | **0.032** | **0.241** | 0.008 U | **0.099** | **0.031** | **0.039** | **0.065** |
| C28 Tricyclic Terpane-22R (T8) | | T8 | **0.191** | 0.029 U | **0.116** | **0.029** | **0.262** | 0.008 U | **0.105** | **0.043** | **0.038** | **0.077** |
| C29 Tricyclic Terpane-22S (T9) | | T9 | **0.147** | 0.029 U | **0.096** | **0.043** | **0.218** | 0.008 U | **0.087** | **0.037** | **0.038** | **0.059** |
| C29 Tricyclic Terpane-22R (T10) | | T10 | **0.169** | 0.029 U | **0.11** | **0.028** | **0.213** | 0.008 U | **0.103** | **0.034** | **0.037** | **0.066** |
| 18a(H)-22,29,30-Trisnomeohopane-TS (T11) | | T11 | **0.297** | 0.029 U | **0.174** | **0.295** | **0.413** | **0.041** | **0.161** | **0.267** | **0.064** | **0.111** |
| 17a(H)-22,29,30-Trisnorhopane-TM (T12) | | T12 | **0.413** | 0.029 U | **0.24** | **0.188** | **0.562** | **0.029** | **0.214** | **0.178** | **0.088** | **0.146** |
| 17a(H)-21b(H)/17b(H),21a(H)-28,30-Bisnorhopane (T14a) | | T14a | **0.081** | 0.029 U | **0.049** | **0.029** | **0.11** | 0.008 U | **0.041** | **0.027** | 0.012 U | 0.011 U |
| 17a(H)-21b(H)-25-Norhopane (TI4b) | | TI4b | **0.161** | 0.029 U | **0.078** | **0.074** | **0.212** | 0.008 U | **0.067** | **0.074** | **0.032** | 0.011 U |
| 30-Norhopane (T15) | | T15 | **0.828** | 0.029 U | **0.442** | **0.651** | **1.15** | **0.084** | **0.41** | **0.593** | **0.142** | **0.268** |
| 18a(H)-30-Norneohopane -C29Ts (T16) | | T16 | **0.288** | 0.029 U | **0.16** | **0.302** | **0.389** | **0.039** | **0.14** | **0.271** | **0.043** | **0.076** |
| 17a(H)-Diahopane (X) | | X | **0.092** | 0.029 U | **0.061** | **0.07** | **0.13** | **0.012** | **0.052** | **0.071** | **0.034** | **0.056 J** |
| 30-Normoretane (T17) | | T17 | **0.177** | 0.029 U | **0.1** | **0.131** | **0.222** | **0.019** | **0.076** | **0.116** | **0.034** | **0.054** |
| 18a(H)/18b(H)-Oleananes (TI8) | | TI8 | **0.138** | 0.029 U | **0.069** | **0.157** | **0.174** | **0.02** | **0.061** | **0.137** | **0.031** | **0.034 J** |
| Hopane (T19) | | T19 | **1.38** | 0.029 U | **0.723** | **0.978** | **1.84** | **0.147** | **0.612** | **1** | **0.229** | **0.414** |
| Moretane (T20) | | T20 | **0.243** | 0.029 U | **0.114** | **0.154** | **0.319** | **0.023** | **0.112** | **0.164** | **0.042** | 0.011 U |
| 30-Homohopane-22S (T21) | | T21 | **0.342** | 0.029 U | **0.177** | **0.233** | **0.452** | **0.035** | **0.146** | **0.228** | **0.061** | **0.1** |
| 30-Homohopane-22R (T22) | | T22 | **0.331** | 0.029 U | **0.175** | **0.203** | **0.46** | **0.031** | **0.155** | **0.198** | **0.061** | **0.113** |
| 30,31-Bishomohopane-22S (T26) | | T26 | **0.221** | 0.029 U | **0.117** | **0.136** | **0.27** | **0.025** | **0.095** | **0.135** | **0.05** | **0.057** |
| 30,31-Bishomohopane-22R (T27) | | T27 | **0.15** | 0.029 U | **0.08** | **0.101** | **0.199** | **0.026** | **0.067** | **0.102** | **0.037** | 0.011 U |
| 30,31-Trishomohopane-22S (T30) | | T30 | **0.122** | 0.029 U | **0.071** | **0.064** | **0.197** | 0.008 U | **0.064** | **0.078** | 0.012 U | 0.011 U |
| 30,31-Trishomohopane-22R (T31) | | T31 | **0.084** | 0.029 U | **0.04** | **0.052** | **0.111** | 0.008 U | **0.034** | **0.047** | 0.012 U | 0.011 U |
| Tetrakishomohopane-22S (T32) | | T32 | **0.072** | 0.029 U | **0.036** | **0.055** | **0.092** | 0.008 U | 0.01 U | **0.045** | 0.012 U | 0.011 U |
| Tetrakishomohopane-22R (T33) | | T33 | **0.045** | 0.029 U | **0.028** | 0.017 U | **0.065** | 0.008 U | 0.01 U | **0.029** | 0.012 U | 0.011 U |
| Pentakishomohopane-22S (T34) | | T34 | **0.068** | 0.029 U | **0.033** | 0.017 U | **0.081** | 0.008 U | 0.01 U | **0.028** | 0.012 U | 0.011 U |
| Pentakishomohopane-22S (T35) | | T35 | 0.011 U | 0.029 U | 0.009 U | 0.017 U | 0.011 U | 0.008 U | 0.01 U | 0.008 U | 0.012 U | 0.011 U |
| 13b(H),17a(H)-20S-Diacholestane (S4) | | S4 | **0.296** | 0.029 U | **0.177** | **0.078** | **0.425** | **0.012** | **0.162** | **0.083** | **0.069** | 0.011 U |
| 13b(H),17a(H)-20R-Diacholestane (S5) | | S5 | **0.157** | 0.029 U | **0.092** | **0.047** | **0.217** | **0.007 J** | **0.083** | **0.048** | **0.045** | 0.011 U |
| 13b(H),17a(H)-20S-Methyldiacholestane (S8) | | S8 | 0.011 U | 0.029 U | 0.009 U | 0.017 U | 0.011 U | 0.008 U | 0.01 U | 0.008 U | 0.012 U | 0.011 U |
| 14a(H),17a(H)-20S-Cholestane (S12) | | S12 | 0.011 U | 0.029 U | 0.009 U | 0.017 U | 0.011 U | 0.008 U | 0.01 U | 0.008 U | 0.012 U | 0.011 U |
| 14a(H),17a(H)-20R-Cholestane (S17) | | S17 | **0.489** | 0.029 U | **0.283** | **0.117** | **0.692** | **0.019** | **0.247** | **0.116** | **0.096** | **0.172** |
| 13b(H),17a(H)-20R-Ethyldiacholestane (S18) | | S18 | **0.053** | 0.029 U | **0.053** | 0.017 U | **0.09** | 0.008 U | 0.01 U | 0.008 U | **0.02** | 0.011 U |
| 13a(H),17b(H)-20S-Ethyldiacholestane (S19) | | S19 | 0.011 U | 0.029 U | 0.009 U | 0.017 U | 0.011 U | 0.008 U | 0.01 U | 0.008 U | 0.012 U | 0.011 U |
| 14a(H),17a(H)-20S-Methylcholestane (S20) | | S20 | **0.178** | 0.029 U | **0.1** | 0.017 U | **0.346** | **0.012** | **0.095** | **0.039** | **0.059** | **0.063** |
| 14a(H),17a(H)-20R-Methylcholestane (S24) | | S24 | **0.21** | 0.029 U | **0.106** | **0.054** | **0.274** | **0.009** | **0.085** | **0.05** | **0.038** | **0.055** |
| 14a(H),17a(H)-20S-Ethylcholestane (S25) | | S25 | **0.211** | 0.029 U | **0.113** | **0.051** | **0.297** | **0.006 J** | **0.097** | **0.047** | **0.041** | **0.067** |
| 14a(H),17a(H)-20R-Ethylcholestane (S28) | | S28 | **0.282** | 0.029 U | **0.114** | **0.069** | **0.369** | **0.009** | **0.1** | **0.052** | **0.049** | **0.065** |
| 14b(H),17b(H)-20R-Cholestane (S14) | | S14 | **0.238** | 0.029 U | **0.138** | **0.058** | **0.337** | **0.01** | **0.136** | **0.058** | **0.053** | **0.093** |
| 14b(H),17b(H)-20S-Cholestane (S15) | | S15 | **0.207** | 0.029 U | **0.12** | **0.062** | **0.298** | **0.009** | **0.106** | **0.054** | **0.05** | **0.073** |
| 14b(H),17b(H)-20R-Methylcholestane (S22) | | S22 | **0.222** | 0.029 U | **0.117** | **0.064** | **0.334** | **0.009** | **0.087** | **0.06** | **0.042** | **0.07** |
| 14b(H),17b(H)-20R-Ethylcholestane (S26) | | S26 | **0.329** | 0.029 U | **0.194** | **0.067** | **0.462** | **0.011** | **0.174** | **0.077** | **0.069** | **0.116** |
| 14b(H),17b(H)-20S-Ethylcholestane (S27) | | S27 | **0.209** | 0.029 U | **0.127** | **0.056** | **0.339** | **0.008 J** | **0.122** | **0.051** | **0.051** | **0.084** |
| **Other** | mg/kg | | | | | | | | | | | |
| Total Petroleum Hydrocarbons | | TPH | **10500 B** | **1200 B** | **8910 B** | **35200 B** | **35900 B** | **3720 B** | **8140 B** | **32800 B** | **8950 B** | **3070 B** |
| Diesel Range Organics | | DRO | **7390 B** | **173 B** | **6010 B** | **27400 B** | **28200 B** | **3020 B** | **6260 B** | **26800 B** | **6230 B** | **2230 B** |

**Table 19. Forensic Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB209 | GPEC-SB210 | GPEC-SB210 | GPEC-SB211 | GPEC-SB212 | GPEC-SB212 | GPEC-SB213 | GPEC-SB214 | GPEC-SB215 | GPEC-SB216 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB209 (28-29) | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) | GPEC-SB211 (37-38) | GPEC-SB212-1 (28-29) | GPEC-SB212-2 (28-29) | GPEC-SB213 (14-15) | GPEC-SB214 (30-31) | GPEC-SB215 (36-37) | GPEC-SB216 (7-8) |
| | | Start Depth | 28 | 29 | 37 | 37 | 28 | 28 | 14 | 30 | 36 | 7 |
| | | End Depth | 29 | 30 | 38 | 38 | 29 | 29 | 15 | 31 | 37 | 8 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 7/9/2012 | 7/9/2012 | 7/9/2012 | 7/16/2012 | 7/10/2012 | 7/10/2012 | 7/2/2012 | 7/14/2012 | 7/16/2012 | 7/15/2012 |
| | | Parent Sample Code | | | | | | | | | | |
| Analyte | Unit | CAS no. | | | | | | | | | | |
| **NYSDEC PAH17** | mg/kg | | | | | | | | | | | |
| Acenaphthene | | 83-32-9 | **2.48** | **0.006** | **0.431** | **9.28** | **8.78 B** | **8.71** | **0.005** | **0.034** | **0.436** | **212** |
| Acenaphthylene | | 208-96-8 | **1.48** | **0.018** | **0.158** | **1.47** | **2.43** | **2.54** | **0.004** | **0.016** | **0.201** | **48.2** |
| Anthracene | | 120-12-7 | **8.38** | **0.016** | **0.633** | **7.52** | **11.8 B** | **12.3** | **0.018** | **0.056** | **0.696** | **125** |
| Benzo(a)anthracene | | 56-55-3 | **10.6** | **0.026** | **0.64** | **5.97** | **13.7 B** | **13.7** | **0.026** | **0.068** | **0.957** | **48.1** |
| Benzo(b)fluoranthene | | 205-99-2 | **4.05** | **0.025** | **0.237** | **1.92** | **4.43 B** | **4.67** | **0.019** | **0.039** | **0.336** | **12.4** |
| Benzo(k)fluoranthene | | 207-08-9 | **2.78** | **0.028** | **0.194** | **1.91** | **3.4 B** | **3.52** | **0.019 B** | **0.04** | **0.232** | **19.8** |
| Benzo(g,h,i)perylene | | 191-24-2 | **3.65** | **0.021** | **0.177** | **1.58** | **3.46 B** | **3.34** | **0.014 B** | **0.033** | **0.267** | **9.84** |
| Benzo(a)pyrene | | 50-32-8 | **7.47** | **0.045** | **0.419** | **3.94** | **8.66 B** | **8.58** | **0.024** | **0.056** | **0.596** | **35** |
| Chrysene | | 218-01-9 | **12.2** | **0.025** | **0.683** | **5.7** | **12.8 B** | **12.8** | **0.029** | **0.068** | **0.861** | **44.2** |
| Dibenz(a,h)anthracene | | 53-70-3 | **2.14 B** | **0.008 B** | **0.086 B** | **0.687 B** | **1.6 B** | **1.54 B** | **0.005 B** | **0.011 B** | **0.132 B** | **3.16 B** |
| Fluoranthene | | 206-44-0 | **11.4** | **0.036** | **0.774** | **8.82** | **18.9 B** | **18.5** | **0.052** | **0.131** | **1.22** | **88.3** |
| Fluorene | | 86-73-7 | **2.25** | **0.006** | **0.143** | **5.47** | **8.49 B** | **7.52** | **0.015** | **0.025** | **0.192** | **120** |
| Indeno(1,2,3-cd)pyrene | | 193-39-5 | **2.45 B** | **0.02 B** | **0.122 B** | **1.28 B** | **2.28 B** | **2.54 B** | **0.012 B** | **0.028 B** | **0.196 B** | **9.19 B** |
| 2-Methylnaphthalene | | 91-57-6 | **2.91** | **0.012** | **0.253** | **19.4** | **13.9** | **9.08** | **0.012** | **0.03** | **0.45** | **377** |
| Naphthalene | | 91-20-3 | **2.38** | **0.067** | **0.306** | **17.4** | **8.35 B** | **6.12** | **0.089** | **0.16** | **0.459** | **458** |
| Phenanthrene | | 85-01-8 | **14.6** | **0.026 B** | **0.924 B** | **19** | **33.3 B** | **33.9 B** | **0.037** | **0.129** | **1.14** | **315** |
| Pyrene | | 129-00-0 | **16** | **0.102** | **1.27** | **11.6** | **22.6 B** | **22.4** | **0.059** | **0.193** | **1.58** | **145** |
| Total PAH (17) (ND=0) | | TPAH17_ND0 | **107.22** | **0.487** | **7.45** | **122.947** | **178.88** | **171.76** | **0.439** | **1.117** | **9.941** | **2070.19** |
| **NYSDEC PAH17 Other SVOCs** | mg/kg | | | | | | | | | | | |
| Benzo(b)naphtho(2,1-d)thiophene | | 239-35-0 | **2.83** | **0.005** | **0.161** | **1.46** | **3.6** | **3.59** | **0.004 J** | **0.012** | **0.21** | **8.77** |
| Benzo(e)pyrene | | 192-97-2 | **7.62** | **0.027** | **0.362** | **2.99** | **7.23 B** | **7.17** | **0.018** | **0.041** | **0.528** | **16.7** |
| Benzothiophene | | 11095-43-5 | **0.127** | **0.009** | **0.019** | **0.493** | **0.342** | **0.287** | **0.02** | **0.013** | **0.026** | **16.1** |
| C1-Benzo(b)thiophenes | | BENbTHPHC1 | **0.513** | 0.004 U | **0.051** | **0.216** | **1.24** | **1.12** | 0.004 U | 0.004 U | **0.064** | **32.1** |
| C2-Benzo(b)thiophenes | | BENbTHPHC2 | **0.967** | **0.004 J** | **0.085** | **0.557** | **2.21** | **2.14** | 0.004 U | **0.01** | **0.123** | **26.9** |
| C3-Benzo(b)thiophenes | | BENbTHPHC3 | **2.03** | 0.004 U | **0.16** | **0.133** | **3.66** | **3.37** | 0.004 U | 0.004 U | **0.254** | **6.7** |
| C4-Benzo(b)thiophenes | | BENbTHPHC4 | **1.53** | 0.004 U | **0.086** | **0.786** | **2.04** | **1.9** | 0.004 U | 0.004 U | **0.132** | **1.06** |
| C1-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC1 | **28.4** | **0.03** | **1.44** | **9.29** | **22.7** | **23.8** | **0.013** | **0.08** | **1.76** | **32** |
| C2-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC2 | **25** | **0.019** | **1.02** | **6.88** | **18.8** | **17** | **0.009** | **0.056** | **1.46** | **8.99** |
| C3-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC3 | **16.8** | **0.015** | **0.644** | **4.47** | **13.5** | **11.8** | 0.004 U | **0.039** | **1.01** | **1.4** |
| C4-Chrysenes/benz(a)anthracenes | | CHRYBENaANTHC4 | **9.95** | 0.004 U | **0.403** | **2.48** | **7.42** | **7.15** | 0.004 U | 0.004 U | **0.543** | **0.819** |
| cis-Decalin | | 493-01-6 | **0.226** | 0.004 U | **0.014** | **0.093** | **0.276** | **0.258** | 0.004 U | 0.004 U | **0.015** | 0.236 U |
| trans-Decalin | | 493-02-7 | **2.08** | 0.004 U | **0.118** | **0.89** | **2.91** | **2.74** | 0.004 U | **0.004 J** | **0.078** | 0.236 U |
| C1-Decalins | | DECLC1 | **5.58** | 0.004 U | **0.352** | **2.43** | **7.76** | **7.24** | 0.004 U | **0.014** | **0.392** | **0.194 J** |
| C2-Decalins | | DECLC2 | **7.64** | 0.004 U | **0.526** | **3.54** | **11** | **8.93** | 0.004 U | **0.032** | **0.677** | 0.236 U |
| C3-Decalins | | DECLC3 | **3.84** | 0.004 U | **0.186** | **1.32** | **3.83** | **3.8** | 0.004 U | 0.004 U | **0.289** | 0.236 U |
| C4-Decalins | | DECLC4 | **8.2** | 0.004 U | **0.324** | **2.02** | **6.2** | **5.95** | 0.004 U | 0.004 U | **0.513** | 0.236 U |
| Dibenzofuran | | 132-64-9 | **1.02** | **0.004 J** | **0.077** | **1.24** | **2.64 B** | **2.62** | **0.006** | **0.018** | **0.078** | **9.49** |
| Dibenzothiophene | | 132-65-0 | **1.23** | **0.004** | **0.116** | **2.35** | **3.84 B** | **3.89** | **0.007** | **0.014** | **0.125** | **46.6** |
| C1-Dibenzothiophenes | | DIBENTHPHC1 | **4.65** | **0.036** | **0.36** | **3.91** | **7.08** | **7.25** | **0.04** | **0.07** | **0.448** | **47.3** |
| C2-Dibenzothiophenes | | DIBENTHPHC2 | **7.93** | **0.011** | **0.455** | **4.21** | **9.47** | **9.52** | **0.008** | **0.027** | **0.583** | **23.1** |
| C3-Dibenzothiophenes | | DIBENTHPHC3 | **7.75** | **0.009** | **0.361** | **2.99** | **7.82** | **8.65** | **0.003 J** | **0.02** | **0.49** | **6.04** |
| C4-Dibenzothiophenes | | DIBENTHPHC4 | **5.04** | **0.008** | **0.231** | **1.79** | **4.47** | **4.81** | 0.004 U | **0.024** | **0.317** | **0.982** |
| 2,6-Dimethylnaphthalene | | 581-42-0 | **3.7** | **0.008** | **0.292** | **9.76** | **10.2** | **9.15** | **0.005** | **0.027** | **0.357** | **132** |
| C1-Fluoranthenes/pyrenes | | FLUORTHPYRC1 | **22.8** | **0.072** | **1.35** | **13.1** | **26.8** | **24.8** | **0.027** | **0.119** | **1.9** | **120** |
| C2-Fluoranthenes/pyrenes | | FLUORTHPYRC2 | **19.6** | **0.036** | **0.966** | **7.36** | **17.7** | **15.1** | **0.011** | **0.082** | **1.31** | **29.7** |
| C3-Fluoranthenes/pyrenes | | FLUORTHPYRC3 | **18.7** | **0.019** | **0.805** | **5.88** | **14.1** | **13.5** | **0.006** | **0.052** | **1.16** | **5.28** |
| C1-Fluorenes | | FLUORC1 | **5.34** | **0.009** | **0.296** | **4.9** | **6.9** | **6.89** | **0.007** | **0.024** | **0.43** | **52.6** |
| C2-Fluorenes | | FLUORC2 | **10.4** | **0.014** | **0.495** | **3.88** | **7.7** | **9.38** | 0.004 U | 0.004 U | **0.63** | **14.6** |
| C3-Fluorenes | | FLUORC3 | **13.6** | **0.018** | **0.566** | **4.17** | **8.51** | **9.58** | **0.013** | **0.04** | **0.756** | **3.82** |
| 1-Methylnaphthalene | | 90-12-0 | **2.04** | **0.01** | **0.273** | **13.3** | **10.7** | **9.99** | **0.011** | **0.04** | **0.403** | **297** |
| 1-Methylphenanthrene | | 832-69-9 | **7.6** | **0.008** | **0.454** | **4.7** | **6.99** | **10.4** | 0.004 U | 0.004 U | **0.444** | **55.3** |
| C1-Naphthalenes | | NAPHC1 | **3.12** | **0.014** | **0.334** | **20.5** | **15.3** | **11.8** | **0.015** | **0.044** | **0.54** | **420** |
| C2-Naphthalenes | | NAPHC2 | **8.5** | **0.021** | **0.512** | **18.3** | **21.5** | **20.6** | **0.012** | **0.059** | **0.768** | **234** |
| C3-Naphthalenes | | NAPHC3 | **15.6** | **0.014** | **0.581** | **9.66** | **17** | **17.2** | **0.009** | **0.039** | **0.771** | **47.7** |
| C4-Naphthalenes | | NAPHC4 | **14.6** | **0.012** | **0.568** | **5.16** | **13.2** | **12** | **0.005** | **0.033** | **0.744** | **5.93** |
| Perylene | | 198-55-0 | **0.72** | **0.008** | **0.103** | **0.601** | **0.879** | **0.833** | **0.006** | **0.015** | **0.056** | **4.61** |
| C1-Phenanthrenes/anthracenes | | PHENANTHC1 | **28.9** | **0.029** | **1.37** | **18.1** | **33.5** | **78.2** | 0.004 U | 0.004 U | **2.39** | **187** |
| C2-Phenanthrenes/anthracenes | | PHENANTHC2 | **32.4** | **0.046** | **1.34** | **11.8** | **26.8** | **25.8** | **0.036** | **0.082** | **1.94** | **51.8** |
| C3-Phenanthrenes/anthracenes | | PHENANTHC3 | **26.4** | **0.014** | **0.926** | **6.95** | **17.7** | **16.9** | **0.006** | **0.037** | **1.28** | **7.88** |
| C4-Phenanthrenes/anthracenes | | PHENANTHC4 | **13** | **0.008** | **0.504** | **3.65** | **10.5** | **8.26** | 0.004 U | **0.024** | **0.752** | **1.25** |
| Retene | | 483-65-8 | **11.1** | **0.019** | **0.438** | **3.29** | **5.93** | **5.81** | **0.007** | **0.031** | **0.748** | **0.417** |
| 1,6,7-Trimethylnaphthalene | | 2245-38-7 | **3.57** | **0.003 J** | **0.124** | **2.29** | **3.58** | **3.55** | 0.004 U | **0.009** | **0.192** | **11** |
| **n-Alkanes and Isoprenoids** | mg/kg | | | | | | | | | | | |
| n-Decane (C10) | | 124-18-5 | **1.01** | 0.041 U | **0.056 J** | **1.72** | **0.924** | **1.12** | 0.043 U | 0.044 U | **0.063** | 2.36 U |
| n-Docosane (C22) | | 629-97-0 | **33.4 E** | 0.041 U | **0.275** | **4.57** | **6.56** | **6.57** | 0.043 U | 0.044 U | **0.125** | 2.36 U |
| n-Dodecane (C12) | | 112-40-3 | **11.1** | 0.041 U | **0.18** | **8.13** | **30.8** | **27.5** | 0.043 U | 0.044 U | **0.356** | 2.36 U |
| n-Dotriacontane (C32) | | 544-85-4 | **3.87** | **0.038 J** | **0.11** | **0.941** | 0.483 U | **1.34** | 0.043 U | **0.029 J** | 0.052 U | 2.36 U |
| n-Eicosane (C20) | | 112-95-8 | **41.4 E** | 0.041 U | **0.472** | **7.98** | **16.2** | **16.5** | 0.043 BU | 0.044 U | **0.314** | 2.36 U |
| n-Heneicosane (C21) | | 629-94-7 | **40.6 E** | 0.041 U | **0.37** | **6.48** | **10.6** | **11.4** | 0.043 U | 0.044 U | **0.224** | 2.36 U |
| n-Hentriacontane (C31) | | 630-04-6 | **5.68** | 0.041 U | **0.235** | **1.99** | **2.19** | **2.51** | **0.029 J** | **0.057** | **0.105** | 2.36 U |
| n-Heptacosane (C27) | | 593-49-7 | **10.1** | 0.041 U | **0.259** | **2.37** | **1** | 0.34 U | 0.043 U | **0.023 J** | 0.052 U | 2.36 U |
| n-Heptadecane (C17) | | 629-78-7 | **27.5** | **0.136 B** | **0.542 B** | **6.33 B** | **13.8** | **13.6 B** | 0.043 U | **0.041 JB** | **0.278 B** | 2.36 BU |
| n-Heptatriacontane (C37) | | 7194-84-5 | **2.26** | 0.041 U | 0.057 U | **0.474** | **1.04** | **1.95** | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Hexacosane (C26) | | 630-01-3 | **13.2** | 0.041 U | **0.19** | **1.88** | 0.483 U | 0.34 U | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Hexadecane (C16) | | 544-76-3 | **24.6** | **0.044 B** | **0.391 B** | **6.54** | **14.4** | **14 B** | 0.043 U | **0.026 J** | **0.325** | 2.36 U |
| n-Hexatriacontane (C36) | | 630-06-8 | **2.1** | **0.037 J** | **0.085** | **0.651** | **1.33** | **1.85** | 0.043 U | **0.025 J** | 0.052 U | 2.36 U |
| n-Nonacosane (C29) | | 630-03-5 | **8.69** | 0.041 U | **0.31** | **2.76** | **3.04** | **3.21** | **0.022 J** | **0.054** | 0.052 U | 2.36 U |
| n-Nonadecane (C19) | | 629-92-5 | **35.4 E** | **0.073 B** | **0.588 B** | **7.56** | **17.2** | **17.1 B** | **0.029 JB** | 0.044 U | **0.28** | 2.36 U |
| n-Nonatriacontane (C39) | | 7194-86-7 | 0.303 U | 0.041 U | 0.057 U | 0.131 U | 0.483 U | **1.21** | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Nonane (C9) | | 111-84-2 | **0.56** | 0.041 U | **0.036 J** | **0.573** | **0.591** | **0.568** | 0.043 U | 0.044 U | **0.033 J** | 2.36 U |

**Table 19. Forensic Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB209 | GPEC-SB210 | GPEC-SB210 | GPEC-SB211 | GPEC-SB212 | GPEC-SB212 | GPEC-SB213 | GPEC-SB214 | GPEC-SB215 | GPEC-SB216 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB209 (28-29) | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) | GPEC-SB211 (37-38) | GPEC-SB212-1 (28-29) | GPEC-SB212-2 (28-29) | GPEC-SB213 (14-15) | GPEC-SB214 (30-31) | GPEC-SB215 (36-37) | GPEC-SB216 (7-8) |
| | | Start Depth | 28 | 29 | 37 | 37 | 28 | 28 | 14 | 30 | 36 | 7 |
| | | End Depth | 29 | 30 | 38 | 38 | 29 | 29 | 15 | 31 | 37 | 8 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 7/9/2012 | 7/9/2012 | 7/9/2012 | 7/16/2012 | 7/10/2012 | 7/10/2012 | 7/2/2012 | 7/14/2012 | 7/16/2012 | 7/15/2012 |
| | | Parent Sample Code | | | | | | | | | | |
| Analyte | Unit | CAS no. | | | | | | | | | | |
| n-Octacosane (C28) | | 630-02-4 | **9.28** | 0.041 U | **0.167** | **1.88** | 0.483 U | 0.34 U | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Octadecane (C18) | | 593-45-3 | **28.9** | **0.173 B** | **0.623 B** | **6.04** | **13.7** | **13.7 B** | **0.03 JB** | **0.025 J** | **0.214** | 2.36 U |
| n-Octane (C10) | | 111-65-9 | **0.532** | 0.041 U | **0.033 J** | **0.451** | **0.468 J** | **0.546** | 0.043 U | 0.044 U | **0.034 J** | 2.36 U |
| n-Octatriacontane (C38) | | 7194-85-6 | **1.73** | 0.041 U | 0.057 U | **0.548** | **0.857** | **1.45** | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Pentacosane (C25) | | 629-99-2 | **22.6** | 0.041 U | **0.433** | **4.14** | **7.33** | **7.6** | 0.043 U | **0.023 J** | 0.052 U | 2.36 U |
| n-Pentadecane (C15) | | 629-62-9 | **21.7** | 0.041 U | **0.232** | **6.36** | **12.9** | **13** | 0.043 U | 0.044 U | **0.248** | 2.36 U |
| n-Pentatriacontane (C35) | | 630-07-9 | **4.68** | 0.041 U | 0.057 U | **1.22** | **2.22** | **3.06** | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| Phytane (C20) | | 638-36-8 | **21.8** | **0.023 JB** | **0.883 B** | **7.46** | **22.8** | **22 B** | 0.043 U | **0.026 J** | **0.801** | 2.36 U |
| Pristane (C19) | | 1921-70-6 | **29.5** | **0.029 JB** | **1.14 B** | **10.2** | **32.3** | **31.9 B** | 0.043 U | **0.033 J** | **1.03** | 2.36 U |
| n-Tetracontane (C40) | | 4181-95-7 | 0.303 U | 0.041 U | 0.057 U | 0.131 U | 0.483 U | 0.34 U | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Tetracosane (C24) | | 646-31-1 | **23.4** | 0.041 U | **0.256** | **3.22** | 0.483 U | 0.34 U | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Tetradecane | | 629-59-4 | **12.4** | **0.032 J** | **0.161** | **6.1** | **13.3** | **10.8** | 0.043 U | 0.044 U | **0.184** | 2.36 U |
| n-Tetratriacontane (C34) | | 14167-59-0 | **5.94** | **0.044** | **0.157** | **1.62** | **2.82** | **4.65** | 0.043 U | **0.031 J** | **0.174** | 2.36 U |
| n-Triacontane (C30) | | 638-68-6 | **6.2** | **0.031 J** | **0.127** | **1.17** | 0.483 U | **2.02** | 0.043 U | **0.024 J** | 0.052 U | 2.36 U |
| n-Tricosane (C23) | | 638-67-5 | **25** | 0.041 U | **0.26** | **3.25** | **3.43** | **3.96** | 0.043 U | 0.044 U | 0.052 U | 2.36 U |
| n-Tridecane (C13) | | 629-50-5 | **7.38** | 0.041 U | **0.158** | **6.89** | **20.3** | **19.4** | 0.043 U | 0.044 U | **0.194** | 2.36 U |
| 2,6,10-Trimethyldodecane (C15) | | 3891-98-3 | **11.5** | 0.041 U | **0.58** | **5.5** | **17.8** | **17.2** | 0.043 U | 0.044 U | **0.634** | 2.36 U |
| 2,6,10-Trimethylpentadecane (C18) | | 3892-00-0 | **23.8** | 0.041 U | **0.841** | **8.07** | **25.2** | **24.2** | 0.043 U | **0.025 J** | **0.818** | 2.36 U |
| 2,6,10-Trimethyltridecane (C16) | | 3891-99-4 | **19.2** | 0.041 U | **0.797** | **8.34** | **27** | **25.1** | 0.043 U | 0.044 U | **0.809** | 2.36 U |
| n-Tritriacontane (C33) | | 630-05-7 | **6.34** | **0.024 J** | **0.173** | **1.73** | **2.46** | **2.85** | 0.043 U | **0.023 J** | 0.052 U | 2.36 U |
| n-Undecane (C11) | | 1120-21-4 | **6.86** | 0.041 U | **0.093** | **6.62** | **13.4** | **12.3** | 0.043 U | 0.044 U | **0.213** | 2.36 U |
| **Biomarkers** | mg/kg | | | | | | | | | | | |
| C23 Tricyclic Terpane (T4) | | T4 | **0.672** | 0.008 U | **0.037** | **0.209** | **0.587** | **0.666** | 0.009 U | 0.009 U | **0.03** | **0.017** |
| C24 Tricyclic Terpane (T5) | | T5 | **0.446** | 0.008 U | **0.032** | **0.144** | **0.389** | **0.449** | 0.009 U | 0.009 U | **0.02** | **0.009 J** |
| C25 Tricyclic terpane-22S/R (T6) | | T6 | **0.367** | 0.008 U | **0.024** | **0.127** | **0.329** | **0.389** | 0.009 U | 0.009 U | **0.022** | **0.011** |
| C24 Tetracyclic Terpane (T6a) | | T6a | **0.295** | 0.008 U | **0.017** | **0.061** | **0.15** | **0.168** | 0.009 U | 0.009 U | **0.015** | **0.02** |
| C26 Tricyclic Terpane-22S (T6b) | | T6b | **0.132** | 0.008 U | **0.013** | **0.053** | **0.138** | **0.163** | 0.009 U | 0.009 U | **0.013** | 0.009 U |
| C26 Tricyclic Terpane-22R (T6c) | | T6c | **0.162** | 0.008 U | **0.015** | **0.057** | **0.168** | **0.197** | 0.009 U | 0.009 U | **0.012** | 0.009 U |
| C28 Tricyclic Terpane-22S (T7) | | T7 | **0.184** | 0.008 U | **0.014** | **0.071** | **0.185** | **0.22** | 0.009 U | 0.009 U | **0.012** | 0.009 U |
| C28 Tricyclic Terpane-22R (T8) | | T8 | **0.223** | 0.008 U | **0.019** | **0.07** | **0.212** | **0.239** | 0.009 U | 0.009 U | **0.012** | 0.009 U |
| C29 Tricyclic Terpane-22S (T9) | | T9 | **0.155** | 0.008 U | **0.014** | **0.068** | **0.178** | **0.199** | 0.009 U | 0.009 U | **0.012** | 0.009 U |
| C29 Tricyclic Terpane-22R (T10) | | T10 | **0.154** | 0.008 U | **0.016** | **0.068** | **0.168** | **0.223** | 0.009 U | 0.009 U | **0.011** | 0.009 U |
| 18a(H)-22,29,30-Trisnomeohopane-TS (T11) | | T11 | **0.467** | 0.008 U | **0.029** | **0.125** | **0.293** | **0.329** | 0.009 U | 0.009 U | **0.03** | **0.025** |
| 17a(H)-22,29,30-Trisnorhopane-TM (T12) | | T12 | **0.662** | 0.008 U | **0.042** | **0.165** | **0.383** | **0.437** | 0.009 U | 0.009 U | **0.039** | **0.031** |
| 17a(H)-21b(H)/17b(H),21a(H)-28,30-Bisnorhopane (T14a) | | T14a | **0.085** | 0.008 U | 0.011 U | **0.036** | **0.086** | **0.099** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 17a(H)-21b(H)-25-Norhopane (TI4b) | | TI4b | **0.179** | 0.008 U | 0.011 U | **0.045** | **0.113** | **0.135** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30-Norhopane (T15) | | T15 | **1.01** | 0.008 U | **0.059** | **0.298** | **0.703** | **0.866** | 0.009 U | 0.009 U | **0.065** | **0.061** |
| 18a(H)-30-Norneohopane -C29Ts (T16) | | T16 | **0.424** | 0.008 U | **0.025** | **0.102** | **0.236** | **0.279** | 0.009 U | 0.009 U | **0.023** | **0.017** |
| 17a(H)-Diahopane (X) | | X | **0.17** | 0.008 U | **0.011 J** | **0.038** | **0.095** | **0.108** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30-Normoretane (T17) | | T17 | **0.202** | 0.008 U | **0.015** | **0.06** | **0.132** | **0.163** | 0.009 U | 0.009 U | **0.02** | 0.009 U |
| 18a(H)/18b(H)-Oleananes (TI8) | | TI8 | **0.163** | 0.008 U | **0.011 J** | **0.051** | **0.089** | **0.119** | 0.009 U | 0.009 U | **0.011** | 0.009 U |
| Hopane (T19) | | T19 | **1.5** | 0.008 U | **0.092** | **0.458** | **1.12** | **1.32** | 0.009 U | 0.009 U | **0.105** | **0.085** |
| Moretane (T20) | | T20 | **0.309** | 0.008 U | 0.011 U | **0.073** | **0.171** | **0.23** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30-Homohopane-22S (T21) | | T21 | **0.337** | 0.008 U | **0.024** | **0.113** | **0.278** | **0.334** | 0.009 U | 0.009 U | **0.026** | **0.02** |
| 30-Homohopane-22R (T22) | | T22 | **0.329** | 0.008 U | **0.032** | **0.14** | **0.311** | **0.356** | 0.009 U | 0.009 U | **0.033** | **0.02** |
| 30,31-Bishomohopane-22S (T26) | | T26 | **0.202** | 0.008 U | **0.024** | **0.078** | **0.172** | **0.206** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30,31-Bishomohopane-22R (T27) | | T27 | **0.138** | 0.008 U | 0.011 U | **0.053** | **0.118** | **0.142** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30,31-Trishomohopane-22S (T30) | | T30 | **0.095** | 0.008 U | 0.011 U | **0.05** | **0.098** | **0.142** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 30,31-Trishomohopane-22R (T31) | | T31 | **0.072** | 0.008 U | 0.011 U | 0.013 U | **0.06** | **0.078** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| Tetrakishomohopane-22S (T32) | | T32 | **0.054** | 0.008 U | 0.011 U | 0.013 U | **0.059** | **0.069** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| Tetrakishomohopane-22R (T33) | | T33 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | 0.019 U | **0.046** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| Pentakishomohopane-22S (T34) | | T34 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | 0.019 U | **0.05** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| Pentakishomohopane-22S (T35) | | T35 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | 0.019 U | 0.014 U | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 13b(H),17a(H)-20S-Diacholestane (S4) | | S4 | **0.417** | 0.008 U | 0.011 U | **0.125** | **0.313** | **0.365** | 0.009 U | 0.009 U | 0.01 U | **0.018** |
| 13b(H),17a(H)-20R-Diacholestane (S5) | | S5 | **0.208** | 0.008 U | 0.011 U | **0.067** | **0.17** | **0.189** | 0.009 U | 0.009 U | **0.013** | **0.01** |
| 13b(H),17a(H)-20S-Methyldiacholestane (S8) | | S8 | **0.121** | 0.008 U | 0.011 U | **0.054** | 0.019 U | **0.117** | 0.009 U | 0.009 U | **0.011** | **0.009 J** |
| 14a(H),17a(H)-20S-Cholestane (S12) | | S12 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | 0.019 U | 0.014 U | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 14a(H),17a(H)-20R-Cholestane (S17) | | S17 | **0.449** | 0.008 U | **0.037** | **0.18** | **0.459** | **0.547** | 0.009 U | 0.009 U | **0.032** | **0.019** |
| 13b(H),17a(H)-20R-Ethyldiacholestane (S18) | | S18 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | **0.08** | **0.053** | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 13a(H),17b(H)-20S-Ethyldiacholestane (S19) | | S19 | 0.012 U | 0.008 U | 0.011 U | 0.013 U | **0.085** | 0.014 U | 0.009 U | 0.009 U | 0.01 U | 0.009 U |
| 14a(H),17a(H)-20S-Methylcholestane (S20) | | S20 | **0.19** | 0.008 U | **0.021** | **0.069** | **0.167** | **0.203** | 0.009 U | 0.009 U | **0.017** | 0.009 U |
| 14a(H),17a(H)-20R-Methylcholestane (S24) | | S24 | **0.098** | 0.008 U | **0.013** | **0.059** | **0.143** | **0.175** | 0.009 U | 0.009 U | **0.012** | **0.008 J** |
| 14a(H),17a(H)-20S-Ethlylcholestane (S25) | | S25 | **0.162** | 0.008 U | **0.014** | **0.071** | **0.17** | **0.197** | 0.009 U | 0.009 U | **0.012** | 0.009 U |
| 14a(H),17a(H)-20R-Ethylcholestane (S28) | | S28 | **0.141** | 0.008 U | **0.017** | **0.073** | **0.186** | **0.271** | 0.009 U | 0.009 U | **0.011** | **0.007 J** |
| 14b(H),17b(H)-20R-Cholestane (S14) | | S14 | **0.255** | 0.008 U | **0.017** | **0.1** | **0.248** | **0.285** | 0.009 U | 0.009 U | **0.015** | **0.008 J** |
| 14b(H),17b(H)-20S-Cholestane (S15) | | S15 | **0.181** | 0.008 U | **0.017** | **0.08** | **0.208** | **0.236** | 0.009 U | 0.009 U | **0.014** | **0.007 J** |
| 14b(H),17b(H)-20R-Methylcholestane (S22) | | S22 | 0.012 U | 0.008 U | **0.013** | **0.076** | **0.192** | **0.23** | 0.009 U | 0.009 U | **0.014** | **0.007 J** |
| 14b(H),17b(H)-20R-Ethylcholestane (S26) | | S26 | **0.318** | 0.008 U | **0.025** | **0.132** | **0.326** | **0.428** | 0.009 U | 0.009 U | **0.017** | **0.009 J** |
| 14b(H),17b(H)-20S-Ethylcholestane (S27) | | S27 | **0.202** | 0.008 U | **0.02** | **0.094** | **0.266** | **0.226** | 0.009 U | 0.009 U | **0.015** | **0.006 J** |
| **Other** | mg/kg | | | | | | | | | | | |
| Total Petroleum Hydrocarbons | | TPH | **21400 B** | **132 B** | **985 B** | **6380 B** | **29700 B** | **10100 B** | **179 B** | **874 B** | **1260 B** | **6200 B** |
| Diesel Range Organics | | DRO | **15600 B** | **37 B** | **618 B** | **4390 B** | **20200 B** | **6950 B** | **74.7 B** | **468 B** | **804 B** | **5320 B** |

**Notes:**
mg/kg - milligrams/kilogram or parts per million (ppm)
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
NYSDEC - New York State Department of Environmental Conservation
Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

Bolding indicates a detected concentration

**Laboratory Qualifiers:**
B - Analyte detected in the associated method blank
D - Results for dilution
E - Value above quantitation range
J - Estimated value
P - The relative percent difference between the primary and confirmation column/detector is >40%. The lower value has been reported.
U - Indicates not detected at or above the reporting limit shown

**Table 19. Forensic Soil Analytical Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

**Notes:**

mg/kg - milligrams/kilogram or parts per million (ppm)
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
NYSDEC - New York State Department of Environmental Conservation
Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

Bolding indicates a detected concentration

**Laboratory Qualifiers:**

B - Analyte detected in the associated method blank
D - Results for dilution
E - Value above quantitation range
J - Estimated value
P - The relative percent difference between the primary and confirmation column/detector is >40%. The lower value has been reported.
U - Indicates not detected at or above the reporting limit shown

**Table 20. Statistical Exceedance Summary**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | Area 1 | | | | | | | | | | | | Area 2 | | | | | | | | | | | | Area 3 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Soil | | | | | | Groundwater | | | | | | Soil | | | | | | | | Groundwater | | | | | | Soil | | | | | | Groundwater | |
| | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Shallow | |
| Totals | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI |
| Samples Collected | 11 | | 5 | | 8 | | 5 | 1 | 6 | 7 | 2 | 1 | 3 | | 32 | | 19 | | 25 | | 12 | 5 | 17 | 11 | 9 | 7 | 1 | | 0 | | 1 | | 1 | 0 |
| Samples with Exceedances | 3 | 3 | 4 | 4 | 1 | 1 | 3 | 1 | 6 | 4 | 2 | 1 | 1 | 1 | 16 | 16 | 13 | 12 | 7 | 7 | 12 | 11 | 16 | 10 | 9 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| % of Samples with Exceedances | 27% | 0% | 80% | 80% | 13% | 13% | 60% | 100% | 100% | 57% | 100% | 100% | 33% | 33% | 50% | 50% | 68% | 63% | 28% | 28% | 100% | 220% | 94% | 91% | 100% | 100% | 100% | 0% | 0% | 0% | 0% | 0% | 100% | 0% |
| Total of Individual Compound Exceedances | 40 | 19 | 38 | 8 | 12 | 4 | 23 | 5 | 29 | 22 | 8 | 7 | 4 | 1 | 85 | 32 | 108 | 33 | 76 | 36 | 53 | 57 | 78 | 49 | 101 | 49 | 3 | 0 | 0 | 0 | 0 | 0 | 14 | 0 |

| | Area 4 | | | | | | | | | | | | Area 5 | | | | | | | | | | | | | | Area 6 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Soil | | | | | | | | Groundwater | | | | Soil | | | | | | | | Groundwater | | | | | | Soil | | | | | | Groundwater | | | |
| | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | |
| Totals | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI |
| Samples Collected | 2 | | 90 | | 12 | | 9 | | 17 | 7 | 10 | 6 | 8 | 6 | 4 | | 102 | | 6 | | 7 | | 3 | 5 | 4 | 4 | 4 | 4 | 25 | | 4 | | 7 | | 4 | 2 | 1 | 1 | 3 | 3 |
| Samples with Exceedances | 2 | 2 | 46 | 38 | 0 | 0 | 0 | 0 | 14 | 7 | 10 | 6 | 8 | 6 | 4 | 4 | 75 | 75 | 2 | 2 | 1 | 1 | 3 | 5 | 3 | 4 | 4 | 4 | 10 | 9 | 0 | 0 | 5 | 0 | 3 | 2 | 1 | 1 | 3 | 3 |
| % of Samples with Exceedances | 100% | 100% | 51% | 42% | 0% | 0% | 0% | 0% | 82% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 74% | 74% | 33% | 33% | 14% | 14% | 100% | 100% | 75% | 100% | 100% | 100% | 40% | 36% | 0% | 0% | 71% | 0% | 75% | 100% | 100% | 100% | 100% | 100% |
| Total of Individual Compound Exceedances | 10 | 3 | 377 | 105 | 0 | 0 | 0 | 0 | 103 | 0 | 52 | 0 | 43 | 0 | 27 | 4 | 618 | 222 | 20 | 3 | 2 | 1 | 35 | 0 | 44 | 0 | 50 | 0 | 49 | 14 | 0 | 0 | 5 | 0 | 16 | 0 | 4 | 0 | 19 | 0 |

| | Area 7 | | | | | | | | | | | | Area 8 | | | | | | | | | | | | Area 9 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Soil | | | | | | | | Groundwater | | | | Soil | | | | | | | | Groundwater | | | | Soil | | | | | | | | Groundwater | | | |
| | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | | Surface | | Shallow | | Intermediate | | Deep | | Shallow | | Intermediate | | Deep | |
| Totals | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PGWSCO | IUSCO | PDI/RI | Supp. RI | PDI/RI | Supp. RI | PDI/RI | Supp. RI |
| Samples Collected | 1 | | 64 | | 3 | | 20 | | 5 | 3 | 5 | 2 | 5 | 3 | 10 | | 95 | | 17 | | 22 | | 16 | 9 | 6 | 3 | 2 | 1 | 64 | | 13 | | 3 | | 6 | | 3 | 2 | 2 | 2 | 1 | 2 |
| Samples with Exceedances | 0 | 0 | 30 | 26 | 0 | 0 | 0 | 0 | 5 | 3 | 5 | 2 | 5 | 3 | 7 | 5 | 58 | 57 | 1 | 1 | 1 | 1 | 12 | 9 | 6 | 3 | 2 | 1 | 51 | 48 | 7 | 6 | 2 | 1 | 3 | 0 | 3 | 2 | 2 | 2 | 1 | 2 |
| % of Samples with Exceedances | 0% | 0% | 47% | 41% | 0% | 0% | 0% | 0% | 100% | 100% | 100% | 100% | 100% | 100% | 70% | 50% | 61% | 60% | 6% | 6% | 5% | 5% | 75% | 100% | 100% | 100% | 100% | 100% | 80% | 75% | 54% | 46% | 67% | 33% | 50% | 0% | 100% | 100% | 100% | 100% | 100% | 100% |
| Total of Individual Compound Exceedances | 0 | 0 | 220 | 81 | 0 | 0 | 0 | 0 | 30 | 0 | 26 | 0 | 38 | 0 | 23 | 7 | 483 | 212 | 8 | 4 | 3 | 1 | 35 | 0 | 32 | 0 | 12 | 0 | 267 | 109 | 53 | 20 | 5 | 1 | 3 | 0 | 12 | 0 | 11 | 0 | 5 | 0 |

Shallow <25'
Intermediate 25-60'
Deep >60'

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-12 (0-4) | GPEC-GT-XX090109 | GPEC-GT-12 (8-10) | GPEC-GT-12 (20-22) | GPEC-GT-12 (25-27) | GPEC-GT-12 (50-52) | GPEC-GT-12 (62-66) |
| | | Start Depth | 0 | 0 | 8 | 20 | 25 | 50 | 62 |
| | | End Depth | 4 | 4 | 10 | 22 | 27 | 52 | 66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/2/2009 | 9/2/2009 |
| | | Parent Sample Code | | GPEC-GT-12 (0-4) | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.42 J** | **0.032 J** | **6.3 J** | **26** | **0.0022 J** | 0.0062 U | 0.0059 U |
| Toluene | | 108-88-3 | **0.061 J** | **0.026 J** | **2.5 J** | **83** | 0.0062 U | 0.0062 U | 0.0059 U |
| Ethylbenzene | | 100-41-4 | **1.8 J** | **1.1 J** | **20 J** | **170** | **0.082** | 0.0062 U | 0.0059 UJ |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **2.2 J** | **1.1 J** | **30 J** | **200** | **0.068** | 0.0062 U | 0.0059 U |
| Total BTEX | | TBTEX | **4.481** | **2.258** | **58.8** | **479** | **0.1522** | ND | ND |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.52 UJ | 0.36 UJ | 3.4 UJ | 23 U | 0.025 U | 0.025 UJ | 0.024 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Bromodichloromethane | | 75-27-4 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 UJ | 0.0059 U |
| Bromoform | | 75-25-2 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 UJ | 0.0062 UJ | 0.0059 UJ |
| Bromomethane | | 74-83-9 | **0.15 J** | 0.18 UJ | **5.1 J** | 9.2 U | 0.012 U | 0.012 U | 0.012 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | **0.052 J** | **0.067 J** | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| Carbon tetrachloride | | 56-23-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Chlorobenzene | | 108-90-7 | 0.083 UJ | 0.09 UJ | **0.4 J** | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| Chloroethane | | 75-00-3 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Chloroform | | 67-66-3 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Chloromethane | | 74-87-3 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.17 UJ | 0.18 UJ | 1.4 UJ | 9.2 U | 0.012 U | 0.012 U | 0.012 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | 0.33 UJ | 0.36 UJ | 1.4 UJ | 9.2 U | 0.025 U | 0.025 U | 0.024 U |
| Styrene | | 100-42-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | **3.1 J** | 0.0062 U | 0.0062 U | 0.0059 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | **0.53 J** | **0.13 J** | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 UJ |
| Tetrachloroethene | | 127-18-4 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | **0.017** | 0.0059 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Trichloroethene | | 79-01-6 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-12 (0-4) | GPEC-GT-XX090109 | GPEC-GT-12 (8-10) | GPEC-GT-12 (20-22) | GPEC-GT-12 (25-27) | GPEC-GT-12 (50-52) | GPEC-GT-12 (62-66) |
| | | Start Depth | 0 | 0 | 8 | 20 | 25 | 50 | 62 |
| | | End Depth | 4 | 4 | 10 | 22 | 27 | 52 | 66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/2/2009 | 9/2/2009 |
| | | Parent Sample Code | | GPEC-GT-12 (0-4) | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.083 UJ | 0.09 UJ | 1.4 UJ | 9.2 U | 0.0062 U | 0.0062 U | 0.0059 U |
| Total VOCs | | TVOC | **5.213** | **2.455** | **64.3** | **482.1** | **0.1522** | **0.017** | ND |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **41 J** | 480 UJ | **36 J** | **350** | **0.27 J** | **3.7** | **0.045 J** |
| Acenaphthylene | | 208-96-8 | **5.9 J** | 480 UJ | **14 J** | **81 J** | **0.084 J** | **1.8** | 0.32 U |
| Anthracene | | 120-12-7 | **27 J** | 480 UJ | **40 J** | **190 J** | **0.22 J** | **6.3** | **0.022 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **6.4 J** | 480 UJ | **17 J** | 240 U | **0.04 J** | **1.5 J** | 0.32 U |
| Fluoranthene | | 206-44-0 | **34 J** | 480 UJ | **52 J** | **200 J** | **0.26 J** | **9.4** | **0.035 J** |
| Fluorene | | 86-73-7 | **28 J** | 480 UJ | **37 J** | **220 J** | **0.22 J** | **2.4** | **0.027 J** |
| 2-Methylnaphthalene | | 91-57-6 | **110 J** | 480 UJ | **120 J** | **1000** | **0.5** | **0.12 J** | **0.06 J** |
| Naphthalene | | 91-20-3 | **230 J** | **72 J** | **240 J** | **2000** | **0.55** | **0.16 J** | **0.093 J** |
| Phenanthrene | | 85-01-8 | **98 J** | **36 J** | **150 J** | **640** | **0.75** | **7.7** | **0.1 J** |
| Pyrene | | 129-00-0 | **87 J** | **61 J** | **160 J** | **400** | **0.44** | **20** | **0.049 J** |
| Benz[a]anthracene | | 56-55-3 | **21 J** | 480 UJ | **38 J** | **120 J** | **0.14 J** | **6** | 0.32 U |
| Benzo[a]pyrene | | 50-32-8 | **17 J** | 480 UJ | **37 J** | **120 J** | **0.13 J** | **6.5** | 0.32 U |
| Benzo[b]fluoranthene | | 205-99-2 | **15 J** | 480 UJ | **27 J** | **93 J** | **0.092 J** | **4.6** | 0.32 U |
| Benzo[k]fluoranthene | | 207-08-9 | **6.1 J** | 480 UJ | **11 J** | **32 J** | **0.03 J** | **1.5 J** | 0.32 U |
| Chrysene | | 218-01-9 | **22 J** | 480 UJ | **41 J** | **120 J** | **0.14 J** | **5.1** | 0.32 U |
| Dibenz[a,h]anthracene | | 53-70-3 | 45 UJ | 480 UJ | **4.4 J** | 240 U | 0.33 U | **0.32 J** | 0.32 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **4.9 J** | 480 UJ | **14 J** | **29 J** | **0.039 J** | **1.4 J** | 0.32 U |
| Total PAHs | | TPAH | **753.3** | **169** | **1038.4** | **5595** | **3.905** | **78.5** | **0.431** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **590 J** | **2900 J** | **220 J** | 240 U | **0.096 J** | 1.7 U | **0.078 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Butyl benzyl phthalate | | 85-68-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | **0.055 J** | 1.7 U | **0.059 J** |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 45 UJ | 480 UJ | **2.1 J** | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4-Chloroaniline | | 106-47-8 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Chloronaphthalene | | 91-58-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Chlorophenol | | 95-57-8 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Dibenzofuran | | 132-64-9 | 45 UJ | 480 UJ | **8.6 J** | **37 J** | **0.042 J** | **0.42 J** | 0.32 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 110 UJ | 1200 UJ | 35 UJ | 600 U | 0.82 U | 4.2 U | 0.79 U |
| 2,4-Dichlorophenol | | 120-83-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Diethyl phthalate | | 84-66-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Dimethyl phthalate | | 131-11-3 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2,4-Dimethylphenol | | 105-67-9 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Di-n-butyl phthalate | | 84-74-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| 2,4-Dinitrophenol | | 51-28-5 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | **11 J** | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Hexachlorobutadiene | | 87-68-3 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |

| | | | Location Name | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPEC-GT-12 (0-4) | GPEC-GT-XX090109 | GPEC-GT-12 (8-10) | GPEC-GT-12 (20-22) | GPEC-GT-12 (25-27) | GPEC-GT-12 (50-52) | GPEC-GT-12 (62-66) |
| | | | Start Depth | 0 | 0 | 8 | 20 | 25 | 50 | 62 |
| | | | End Depth | 4 | 4 | 10 | 22 | 27 | 52 | 66 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/2/2009 | 9/2/2009 |
| | | | Parent Sample Code | | GPEC-GT-12 (0-4) | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 110 UJ | 1200 UJ | 35 UJ | 600 U | 0.82 U | 4.2 U | 0.79 UJ |
| Hexachloroethane | | 67-72-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Isophorone | | 78-59-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Methylphenol | | 95-48-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Nitroaniline | | 88-74-4 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| 3-Nitroaniline | | 99-09-2 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| 4-Nitroaniline | | 100-01-6 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Nitrobenzene | | 98-95-3 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2-Nitrophenol | | 88-75-5 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 4-Nitrophenol | | 100-02-7 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Pentachlorophenol | | 87-86-5 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| Phenol | | 108-95-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | 280 UJ | 3000 UJ | 88 UJ | 1500 U | 2.1 U | 11 U | 2 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 45 UJ | 480 UJ | 14 UJ | 240 U | 0.33 U | 1.7 U | 0.32 U |
| Total SVOCs | | TSVOC | **1354.3** | **3069** | **1269.1** | **5632** | **4.098** | **78.92** | **0.568** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 2.8 UJ | 0.3 UJ | 0.46 UJ | 0.031 U | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1221 | | 11104-28-2 | 2.8 UJ | 0.3 UJ | 0.46 UJ | 0.031 U | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1232 | | 11141-16-5 | 2.8 UJ | 0.3 UJ | 0.46 UJ | 0.031 U | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1242 | | 53469-21-9 | **11 J** | **1.2 J** | **3.2 J** | 0.031 U | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1248 | | 12672-29-6 | 2.8 UJ | 0.3 UJ | 0.46 UJ | 0.031 U | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1254 | | 11097-69-1 | **7.6 J** | **2.8 J** | **3.6 J** | **0.082 J** | 0.021 U | 0.021 UJ | 0.02 U |
| Aroclor 1260 | | 11096-82-5 | **2.6 J** | **1.8 J** | **0.74 J** | **0.05 J** | 0.021 UJ | 0.021 UJ | 0.02 UJ |
| Aroclor 1262 | | 37324-23-5 | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | **21.2** | **5.8** | **7.54** | **0.132** | ND | ND | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-12 (0-4) | GPEC-GT-XX090109 | GPEC-GT-12 (8-10) | GPEC-GT-12 (20-22) | GPEC-GT-12 (25-27) | GPEC-GT-12 (50-52) | GPEC-GT-12 (62-66) |
| | | Start Depth | 0 | 0 | 8 | 20 | 25 | 50 | 62 |
| | | End Depth | 4 | 4 | 10 | 22 | 27 | 52 | 66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/2/2009 | 9/2/2009 |
| | | Parent Sample Code | | GPEC-GT-12 (0-4) | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 | GPEC-GT12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-12 (0-4) | GPEC-GT-XX090109 | GPEC-GT-12 (8-10) | GPEC-GT-12 (20-22) | GPEC-GT-12 (25-27) | GPEC-GT-12 (50-52) | GPEC-GT-12 (62-66) |
| | | Start Depth | 0 | 0 | 8 | 20 | 25 | 50 | 62 |
| | | End Depth | 4 | 4 | 10 | 22 | 27 | 52 | 66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/2/2009 | 9/2/2009 |
| | | Parent Sample Code | | GPEC-GT-12 (0-4) | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **16800 J** | **17200 J** | **12600 J** | **9750** | **2100** | **2030** | **4090** |
| Antimony | | 7440-36-0 | 13.6 U | 14.9 UJ | **23.1 J** | 7.4 UJ | 4.9 UJ | 5 UJ | 4.8 UJ |
| Arsenic | | 7440-38-2 | **109 J** | **94.7 J** | **221 J** | **28.4** | 6.2 U | 6.4 U | 6.1 U |
| Barium | | 7440-39-3 | **241 J** | **254 J** | **358 J** | **149** | **7** | **7.8** | **32.7** |
| Beryllium | | 7440-41-7 | 4.1 UJ | 4.5 UJ | **1.2 J** | 2.3 U | 1.5 U | 1.5 U | 1.5 U |
| Cadmium | | 7440-43-9 | **119 J** | **83.9 J** | **167 J** | **0.71 J** | 1.5 U | 1.5 U | 1.5 U |
| Calcium | | 7440-70-2 | **15500 J** | **16600 J** | **22800 J** | **8810** | **9800** | **11700** | **6090** |
| Chromium | | 7440-47-3 | **952 J** | **682 J** | **1080 J** | **33.7 J** | **6.1 J** | **4.9 J** | **9.9 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 0.8 UJ | 0.8 UJ | 0.8 UJ | **0.77 J** | 1.1 U | 0.8 U | **0.48 J** |
| Cobalt | | 7440-48-4 | **42.1 J** | **23.8 J** | **61.5 J** | **9.1** | **1.9** | **1.7** | **4.7** |
| Copper | | 7440-50-8 | **6940 J** | **3980 J** | **20100 J** | **348 J** | **8 J** | **5.2 J** | **12 J** |
| Iron | | 7439-89-6 | **37800 J** | **44600 J** | **38600 J** | **21900** | **5020** | **7260** | **15800** |
| Lead | | 7439-92-1 | **1550 J** | **1090 J** | **3280 J** | **237 J** | 4.4 UJ | 4.5 UJ | **4.4 J** |
| Magnesium | | 7439-95-4 | **10900 J** | **13300 J** | **8130 J** | **5450** | **5610** | **5300** | **4050** |
| Manganese | | 7439-96-5 | **271 J** | **297 J** | **247 J** | **373** | **95.6** | **146** | **324** |
| Mercury | | 7439-97-6 | **9.7 J** | **4 J** | **19.8 J** | **0.87** | 0.06 U | 0.062 U | **0.0047 J** |
| Nickel | | 7440-02-0 | **1040 J** | **705 J** | **2540 J** | **62.2** | **5.8** | **4.9** | **9.6** |
| Potassium | | 7440-09-7 | **3150 J** | **3660 J** | **2550 J** | **1830 J** | **403 J** | **462 J** | **856 J** |
| Selenium | | 7782-49-2 | 31 UJ | 33.8 UJ | 24.2 UJ | 16.9 UJ | 11 UJ | 11.4 UJ | 10.9 UJ |
| Silver | | 7440-22-4 | **29.7 J** | **22.9 J** | **35.3 J** | **0.47 J** | 1.5 U | 1.5 U | 1.5 U |
| Sodium | | 7440-23-5 | **18500 J** | **21600 J** | **14300 J** | **2770 J** | **217 J** | **516 J** | **352 J** |
| Thallium | | 7440-28-0 | 12.4 UJ | 14.9 UJ | 9.7 UJ | 6.8 UJ | 4.4 UJ | 5.6 UJ | 4.4 UJ |
| Tin | | 7440-31-5 | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | | 7440-62-2 | **174 J** | **118 J** | **149 J** | **31.1** | **7.5** | **7.5** | **18.1** |
| Zinc | | 7440-66-6 | **6780 J** | **4800 J** | **10900 J** | **391 J** | **13 J** | **10 J** | **21 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | 0.659 UJ | 0.719 UJ | **0.107 J** | 0.359 U | 0.242 UJ | 0.246 UJ | 0.232 UJ |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **179000 J** | **96300 J** | **260000** | **61800** | **4930** | **7010 J** | **8270** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT16 | GPEC-GT16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-14 (0-6) | GPEC-GT-14 (6-8) | GPEC-GT-14 (15-17) | GPEC-GT-14 (30-32) | GPEC-GT-14 (50-52) | GPEC GT-16 (6-10) | GPEC GT-16 (25-27) |
| | | Start Depth | 0 | 6 | 15 | 30 | 50 | 6 | 25 |
| | | End Depth | 6 | 8 | 17 | 32 | 52 | 10 | 27 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 8/25/2009 | 8/25/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.47 J** | **3.2 J** | **230 J** | 0.0058 U | 0.006 U | **0.36 J** | **0.22 J** |
| Toluene | | 108-88-3 | **0.031 J** | **2.2 J** | **580 J** | 0.0058 U | 0.006 U | **0.031 J** | **0.16 J** |
| Ethylbenzene | | 100-41-4 | **0.77 J** | **14 J** | **610 J** | **0.011** | **0.0033 J** | **0.42 J** | **0.32 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.78 J** | **16 J** | **600 J** | **0.0099** | **0.0048 J** | **0.46 J** | **0.39 J** |
| Total BTEX | | TBTEX | **2.051** | **35.4** | **2020** | **0.0209** | **0.0081** | **1.271** | **1.09** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.79 UJ | 3.6 UJ | 130 UJ | 0.023 U | 0.024 U | 0.73 UJ | **0.084 J** |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Bromodichloromethane | | 75-27-4 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Bromoform | | 75-25-2 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 UJ | 0.006 UJ | 0.081 UJ | 0.02 UJ |
| Bromomethane | | 74-83-9 | 0.18 UJ | 1.4 UJ | 54 UJ | 0.012 U | 0.012 U | 0.16 U | 0.039 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | **0.16 J** | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | **0.094 J** | 0.02 UJ |
| Carbon tetrachloride | | 56-23-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Chlorobenzene | | 108-90-7 | **0.023 J** | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Chloroethane | | 75-00-3 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Chloroform | | 67-66-3 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Chloromethane | | 74-87-3 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.18 UJ | 1.4 UJ | 54 UJ | 0.012 U | 0.012 U | 0.16 UJ | 0.039 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.005 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | 0.36 UJ | 1.4 UJ | 54 UJ | 0.023 U | 0.024 U | 0.32 UJ | 0.078 UJ |
| Styrene | | 100-42-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | **0.052 J** |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | **0.19 J** | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | **0.086 J** | 0.02 UJ |
| Tetrachloroethene | | 127-18-4 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | **0.024 J** | 0.02 UJ |
| Trichloroethene | | 79-01-6 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT16 | GPEC-GT16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-14 (0-6) | GPEC-GT-14 (6-8) | GPEC-GT-14 (15-17) | GPEC-GT-14 (30-32) | GPEC-GT-14 (50-52) | GPEC GT-16 (6-10) | GPEC GT-16 (25-27) |
| | | Start Depth | 0 | 6 | 15 | 30 | 50 | 6 | 25 |
| | | End Depth | 6 | 8 | 17 | 32 | 52 | 10 | 27 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 8/25/2009 | 8/25/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.09 UJ | 1.4 UJ | 54 UJ | 0.0058 U | 0.006 U | 0.081 UJ | 0.02 UJ |
| Total VOCs | | TVOC | **2.424** | **35.4** | **2020** | **0.0209** | **0.0081** | **1.475** | **1.226** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **6.3 J** | **24 J** | **1600 J** | **0.4** | **0.36** | **24 J** | 1 UJ |
| Acenaphthylene | | 208-96-8 | **1.9 J** | **5.9 J** | **820 J** | **0.082 J** | **0.059 J** | **3.9 J** | **0.074 J** |
| Anthracene | | 120-12-7 | **7.2 J** | **24 J** | **1100 J** | **0.35** | **0.28 J** | **24 J** | 1 UJ |
| Benzo[g,h,i]perylene | | 191-24-2 | 19 UJ | **14 J** | 1100 UJ | **0.062 J** | **0.052 J** | **15 J** | 1 UJ |
| Fluoranthene | | 206-44-0 | **18 J** | **45 J** | **1200 J** | **0.39** | **0.32 J** | **42 J** | 1 UJ |
| Fluorene | | 86-73-7 | **4.3 J** | **18 J** | **1400 J** | **0.37** | **0.26 J** | **17 J** | 1 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **6 J** | **46 J** | **5400 J** | **0.15 J** | **0.39** | **24 J** | **0.15 J** |
| Naphthalene | | 91-20-3 | **20 J** | **460 J** | **22000 J** | **0.14 J** | **0.37** | **75 J** | **11 J** |
| Phenanthrene | | 85-01-8 | **20 J** | **83 J** | **3700 J** | **1.2** | **0.94** | **77 J** | 1 UJ |
| Pyrene | | 129-00-0 | **29 J** | **77 J** | **2200 J** | **0.66** | **0.58** | **86 J** | 1 UJ |
| Benz[a]anthracene | | 56-55-3 | **9.3 J** | **26 J** | **780 J** | **0.28 J** | **0.16 J** | **23 J** | 1 UJ |
| Benzo[a]pyrene | | 50-32-8 | **7.5 J** | **22 J** | **780 J** | **0.22 J** | **0.15 J** | **15 J** | 1 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | **6.2 J** | **16 J** | **600 J** | **0.15 J** | **0.093 J** | **17 J** | 1 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | **2.1 J** | **6.7 J** | **180 J** | **0.057 J** | **0.035 J** | **5.8 J** | 1 UJ |
| Chrysene | | 218-01-9 | **10 J** | **28 J** | **860 J** | **0.29 J** | **0.16 J** | **23 J** | 1 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **5.2 J** | **11 J** | **190 J** | **0.063 J** | **0.043 J** | **12 J** | 1 UJ |
| Total PAHs | | TPAH | **153** | **906.6** | **42810** | **4.864** | **4.252** | **483.7** | **11.224** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **270 J** | **220 J** | 1100 UJ | **0.065 J** | **0.065 J** | **410 J** | **0.15 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 19 UJ | 39 UJ | 1100 UJ | **0.085 J** | **0.03 J** | 42 UJ | 1 UJ |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4-Chloroaniline | | 106-47-8 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Chlorophenol | | 95-57-8 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Dibenzofuran | | 132-64-9 | 19 UJ | **4.9 J** | **210 J** | **0.036 J** | **0.041 J** | **4.6 J** | 1 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 3,3-Dichlorobenzidine | | 91-94-1 | 48 UJ | 96 UJ | 2800 UJ | 0.75 U | 0.8 U | 100 UJ | 2.5 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Diethyl phthalate | | 84-66-2 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Dimethyl phthalate | | 131-11-3 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | **0.086 J** |
| Di-n-butyl phthalate | | 84-74-2 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Hexachlorobutadiene | | 87-68-3 | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT16 | GPEC-GT16 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPEC-GT-14 (0-6) | GPEC-GT-14 (6-8) | GPEC-GT-14 (15-17) | GPEC-GT-14 (30-32) | GPEC-GT-14 (50-52) | GPEC GT-16 (6-10) | GPEC GT-16 (25-27) |
| | | | Start Depth | 0 | 6 | 15 | 30 | 50 | 6 | 25 |
| | | | End Depth | 6 | 8 | 17 | 32 | 52 | 10 | 27 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 8/25/2009 | 8/25/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | | 48 UJ | 96 UJ | 2800 UJ | 0.75 U | 0.8 U | 100 UJ | 2.5 UJ |
| Hexachloroethane | | 67-72-1 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Isophorone | | 78-59-1 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Methylphenol | | 95-48-7 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Nitroaniline | | 88-74-4 | | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| 3-Nitroaniline | | 99-09-2 | | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| 4-Nitroaniline | | 100-01-6 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Nitrobenzene | | 98-95-3 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2-Nitrophenol | | 88-75-5 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 4-Nitrophenol | | 100-02-7 | | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Pentachlorophenol | | 87-86-5 | | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| Phenol | | 108-95-2 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Pyridine | | 110-86-1 | | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| 2,4,5-Trichlorophenol | | 95-95-4 | | 120 UJ | 240 UJ | 7200 UJ | 1.9 U | 2 U | 260 UJ | 6.4 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | | 19 UJ | 39 UJ | 1100 UJ | 0.3 U | 0.32 U | 42 UJ | 1 UJ |
| Total SVOCs | | TSVOC | | **423** | **1131.5** | **43020** | **5.05** | **4.388** | **898.3** | **11.46** |
| **PCBS** | mg/kg | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | | 0.6 UJ | 0.49 UJ | 0.72 UJ | 0.019 U | 0.02 U | 0.55 UJ | 0.066 UJ |
| Aroclor 1221 | | 11104-28-2 | | 0.6 UJ | 0.49 UJ | 0.72 UJ | 0.019 U | 0.02 U | 0.55 UJ | 0.066 UJ |
| Aroclor 1232 | | 11141-16-5 | | 0.6 UJ | 0.49 UJ | 0.72 UJ | 0.019 U | 0.02 U | 0.55 UJ | 0.066 UJ |
| Aroclor 1242 | | 53469-21-9 | | **4.1 J** | **3.1 J** | 0.72 UJ | 0.019 U | 0.02 U | **2.5 J** | 0.066 UJ |
| Aroclor 1248 | | 12672-29-6 | | 0.6 UJ | 0.49 UJ | **5.3 J** | 0.019 U | 0.02 U | 0.55 UJ | 0.066 UJ |
| Aroclor 1254 | | 11097-69-1 | | **2.2 J** | **2.4 J** | **2.8 J** | 0.019 U | 0.02 U | **1.8 J** | 0.066 UJ |
| Aroclor 1260 | | 11096-82-5 | | **0.9 J** | **0.91 J** | **0.72 J** | 0.019 UJ | 0.02 UJ | **0.67 J** | 0.066 UJ |
| Aroclor 1262 | | 37324-23-5 | | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | | **7.2** | **6.41** | **8.82** | ND | ND | **4.97** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | | |
| Aldrin | | 309-00-2 | | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT16 | GPEC-GT16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-14 (0-6) | GPEC-GT-14 (6-8) | GPEC-GT-14 (15-17) | GPEC-GT-14 (30-32) | GPEC-GT-14 (50-52) | GPEC GT-16 (6-10) | GPEC GT-16 (25-27) |
| | | Start Depth | 0 | 6 | 15 | 30 | 50 | 6 | 25 |
| | | End Depth | 6 | 8 | 17 | 32 | 52 | 10 | 27 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 8/25/2009 | 8/25/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT14 | GPEC-GT16 | GPEC-GT16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-14 (0-6) | GPEC-GT-14 (6-8) | GPEC-GT-14 (15-17) | GPEC-GT-14 (30-32) | GPEC-GT-14 (50-52) | GPEC GT-16 (6-10) | GPEC GT-16 (25-27) |
| | | Start Depth | 0 | 6 | 15 | 30 | 50 | 6 | 25 |
| | | End Depth | 6 | 8 | 17 | 32 | 52 | 10 | 27 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 9/1/2009 | 8/25/2009 | 8/25/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **18000 J** | **16700 J** | **7310 J** | **2450** | **2910** | **15300 J** | **72700 J** |
| Antimony | | 7440-36-0 | 14.6 UJ | **15.4 J** | **14.5 J** | 4.7 UJ | 5 UJ | **10.9 J** | 15.6 UJ |
| Arsenic | | 7440-38-2 | **111 J** | **203 J** | **210 J** | 6 U | 6.3 U | **129 J** | **8.4 J** |
| Barium | | 7440-39-3 | **244 J** | **349 J** | **282 J** | **7.8** | **13.3** | **281 J** | **855 J** |
| Beryllium | | 7440-41-7 | 4.4 UJ | **1.1 J** | **0.82 J** | 1.4 U | 1.5 U | **1.3 J** | **4 J** |
| Cadmium | | 7440-43-9 | **115 J** | **176 J** | **43 J** | 1.4 U | 1.5 U | **133 J** | 4.7 UJ |
| Calcium | | 7440-70-2 | **15300 J** | **19100 J** | **8250 J** | **8730** | **13100** | **15100 J** | **34600 J** |
| Chromium | | 7440-47-3 | **898 J** | **1710 J** | **368 J** | **5.8 J** | **8.6 J** | **966 J** | **181 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 2.9 UJ | 0.8 UJ | **2 J** | **0.86 J** | **0.8 J** | 0.8 UJ | **1 J** |
| Cobalt | | 7440-48-4 | **29.1 J** | **49.1 J** | **20.8 J** | **2.1** | **2.8** | **40.3 J** | **53.1 J** |
| Copper | | 7440-50-8 | **6220 J** | **9000 J** | **6420 J** | **7.6 J** | **7.1 J** | **7480 J** | **119 J** |
| Iron | | 7439-89-6 | **39000 J** | **43800 J** | **25400 J** | **5980** | **7230** | **34600 J** | **117000 J** |
| Lead | | 7439-92-1 | **1280 J** | **1610 J** | **820 J** | **1.2 J** | 4.5 UJ | **1360 J** | **34.1 J** |
| Magnesium | | 7439-95-4 | **12100 J** | **9920 J** | **3870 J** | **5200** | **6440** | **9620 J** | **54900 J** |
| Manganese | | 7439-96-5 | **294 J** | **307 J** | **137 J** | **101** | **160** | **256 J** | **2000 J** |
| Mercury | | 7439-97-6 | **5.9 J** | **9.7 J** | **3.5 J** | 0.056 U | 0.057 U | **6.1 J** | **0.03 J** |
| Nickel | | 7440-02-0 | **993 J** | **2370 J** | **1740 J** | **5.8** | **6.9** | **1340 J** | **170 J** |
| Potassium | | 7440-09-7 | **3730 J** | **3470 J** | **1510 J** | **468 J** | **750 J** | **3390 J** | **30900 J** |
| Selenium | | 7782-49-2 | 33.1 UJ | 26.4 UJ | 21.2 UJ | 10.6 UJ | 11.3 UJ | **12.5 J** | 35.6 UJ |
| Silver | | 7440-22-4 | **30.4 J** | **44.3** | **11.2 J** | 1.4 U | 1.5 U | **37.5 J** | 4.7 UJ |
| Sodium | | 7440-23-5 | **22300 J** | **16300 J** | **7550 J** | **924 J** | **365 J** | **17100 J** | **8680 J** |
| Thallium | | 7440-28-0 | 13.3 UJ | 10.6 UJ | 9.2 UJ | 4.3 UJ | 4.5 UJ | 11.7 UJ | 14.2 UJ |
| Tin | | 7440-31-5 | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | | 7440-62-2 | **151 J** | **150 J** | **56.1 J** | **7.9** | **10.1** | **135 J** | **195 J** |
| Zinc | | 7440-66-6 | **6050 J** | **12100 J** | **4320 J** | **12.7 J** | **14.1 J** | **7840 J** | **316 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | 0.709 UJ | **0.113 J** | **0.127 J** | 0.226 UJ | 0.241 UJ | **0.194 J** | 0.777 UJ |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **116000** | **150000** | **318000** | **4680** | **5540** | **149000** | **6010** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT16 | GPEC-GT16 | GPEC-GT16 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC GT-16 (45-47) | GPEC-GT-16 (75-77) | GPEC-GT-16 (100-102) | GPEC-GT-18 (0-4) | GPEC-GT-18 (6-8) | GPEC-GT-18 (15-17) | GPEC-GT-18 (20-22) |
| | | Start Depth | 45 | 75 | 100 | 0 | 6 | 15 | 20 |
| | | End Depth | 47 | 77 | 102 | 4 | 8 | 17 | 22 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 8/25/2009 | 8/27/2009 | 8/28/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 0.65 U | 0.006 U | 0.0058 U | **0.059 J** | **0.38 J** | **91 J** | 0.0065 U |
| Toluene | | 108-88-3 | 0.65 U | 0.006 U | 0.0058 U | **0.0048 J** | **0.024 J** | **170 J** | 0.0065 U |
| Ethylbenzene | | 100-41-4 | **1.3** | 0.006 U | 0.0058 U | **0.12 J** | **0.45 J** | **470 J** | 0.0065 U |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.88** | 0.006 U | 0.0058 U | **0.11 J** | **0.57 J** | **510 J** | 0.0065 U |
| Total BTEX | | TBTEX | **2.18** | ND | ND | **0.2938** | **1.424** | **1241** | ND |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | R | 0.024 U | 0.023 UJ | **0.34 J** | **0.37 J** | 110 UJ | 0.026 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Bromodichloromethane | | 75-27-4 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 UJ |
| Bromoform | | 75-25-2 | 0.65 U | 0.006 UJ | 0.0058 UJ | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 UJ |
| Bromomethane | | 74-83-9 | 0.65 U | 0.012 U | 0.012 U | 0.077 UJ | 0.17 UJ | 45 UJ | 0.013 U |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 0.65 U | 0.006 U | 0.0058 U | **0.052 J** | **0.056 J** | 45 UJ | 0.0065 U |
| Carbon tetrachloride | | 56-23-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Chlorobenzene | | 108-90-7 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Chloroethane | | 75-00-3 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Chloroform | | 67-66-3 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Chloromethane | | 74-87-3 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,2-Dichloropropane | | 78-87-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.65 U | 0.012 U | 0.012 U | 0.077 UJ | 0.17 UJ | 45 UJ | 0.013 U |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | 0.65 U | 0.024 U | 0.023 U | 0.15 UJ | 0.33 UJ | 45 UJ | 0.026 U |
| Styrene | | 100-42-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Tetrachloroethene | | 127-18-4 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Trichloroethene | | 79-01-6 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT16 | GPEC-GT16 | GPEC-GT16 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC GT-16 (45-47) | GPEC-GT-16 (75-77) | GPEC-GT-16 (100-102) | GPEC-GT-18 (0-4) | GPEC-GT-18 (6-8) | GPEC-GT-18 (15-17) | GPEC-GT-18 (20-22) |
| | | Start Depth | 45 | 75 | 100 | 0 | 6 | 15 | 20 |
| | | End Depth | 47 | 77 | 102 | 4 | 8 | 17 | 22 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 8/25/2009 | 8/27/2009 | 8/28/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.65 U | 0.006 U | 0.0058 U | 0.038 UJ | 0.083 UJ | 45 UJ | 0.0065 U |
| Total VOCs | | TVOC | **2.18** | ND | ND | **0.6858** | **1.85** | **1241** | ND |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **0.076 J** | **0.53** | **0.072 J** | **8.4 J** | **3.8 J** | **1000 J** | 0.34 U |
| Acenaphthylene | | 208-96-8 | 0.34 U | **0.24 J** | 0.31 U | **3 J** | **1 J** | **140 J** | 0.34 U |
| Anthracene | | 120-12-7 | **0.045 J** | **0.076 J** | **0.056 J** | **9.6 J** | **3.9 J** | **480 J** | 0.34 U |
| Benzo[g,h,i]perylene | | 191-24-2 | 0.34 U | 0.32 U | 0.31 U | **12 J** | **1.7 J** | **110 J** | 0.34 U |
| Fluoranthene | | 206-44-0 | **0.051 J** | **0.094 J** | **0.068 J** | **29 J** | **13 J** | **460 J** | **0.018 J** |
| Fluorene | | 86-73-7 | 0.34 U | **0.085 J** | **0.048 J** | **4.6 J** | **3.2 J** | **580 J** | 0.34 U |
| 2-Methylnaphthalene | | 91-57-6 | **0.015 J** | **0.01 J** | 0.31 U | **3.3 J** | **4 J** | **2800 J** | **0.021 J** |
| Naphthalene | | 91-20-3 | **0.15 J** | **0.053 J** | 0.31 U | **9.6 J** | **8.6 J** | **5200 J** | **0.067 J** |
| Phenanthrene | | 85-01-8 | **0.18 J** | **0.31 J** | **0.23 J** | **12 J** | **11 J** | **1600 J** | **0.032 J** |
| Pyrene | | 129-00-0 | **0.1 J** | **0.16 J** | **0.13 J** | **43 J** | **16 J** | **1300 J** | **0.03 J** |
| Benz[a]anthracene | | 56-55-3 | **0.018 J** | **0.049 J** | **0.039 J** | **16 J** | **6.4 J** | **320 J** | 0.34 U |
| Benzo[a]pyrene | | 50-32-8 | 0.34 U | **0.039 J** | **0.032 J** | **14 J** | **4.7 J** | **300 J** | 0.34 U |
| Benzo[b]fluoranthene | | 205-99-2 | 0.34 U | 0.32 U | 0.31 U | **12 J** | **4.6 J** | **200 J** | 0.34 U |
| Benzo[k]fluoranthene | | 207-08-9 | 0.34 U | 0.32 U | 0.31 U | **4.3 J** | **2.1 J** | **81 J** | 0.34 U |
| Chrysene | | 218-01-9 | 0.34 U | **0.042 J** | **0.033 J** | **18 J** | **6.9 J** | **310 J** | 0.34 U |
| Dibenz[a,h]anthracene | | 53-70-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.34 U | 0.32 U | 0.31 U | **7.3 J** | **1.6 J** | **90 J** | 0.34 U |
| Total PAHs | | TPAH | **0.635** | **1.688** | **0.708** | **206.1** | **92.5** | **14971** | **0.168** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **0.081 J** | 0.32 U | 0.31 U | **370 J** | **150 J** | 600 UJ | **0.19 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Butyl benzyl phthalate | | 85-68-7 | **0.022 J** | **0.11 J** | **0.043 J** | 20 UJ | 18 UJ | 600 UJ | **0.09 J** |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 0.34 U | **0.023 J** | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4-Chloroaniline | | 106-47-8 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2-Chloronaphthalene | | 91-58-7 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2-Chlorophenol | | 95-57-8 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Dibenzofuran | | 132-64-9 | 0.34 U | **0.14 J** | 0.31 U | 20 UJ | **1.3 J** | **94 J** | 0.34 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.34 U | 0.32 U | 0.31 U | 21 UJ | 18 UJ | 300 UJ | 0.35 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.34 U | 0.32 U | 0.31 U | 21 UJ | 18 UJ | 300 UJ | 0.35 UJ |
| 3,3-Dichlorobenzidine | | 91-94-1 | 0.84 U | 0.79 U | 0.77 U | 50 UJ | 43 UJ | 1500 UJ | 0.85 U |
| 2,4-Dichlorophenol | | 120-83-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Diethyl phthalate | | 84-66-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Dimethyl phthalate | | 131-11-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2,4-Dimethylphenol | | 105-67-9 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Di-n-butyl phthalate | | 84-74-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 2.1 UJ | 2 UJ | 2 UJ | 130 UJ | 110 UJ | 3800 UJ | 2.2 U |
| 2,4-Dinitrophenol | | 51-28-5 | 2.1 UJ | 2 UJ | 2 UJ | 130 UJ | 110 UJ | 3800 UJ | 2.2 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Hexachlorobutadiene | | 87-68-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-GT16 | GPEC-GT16 | GPEC-GT16 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPEC GT-16 (45-47) | GPEC-GT-16 (75-77) | GPEC-GT-16 (100-102) | GPEC-GT-18 (0-4) | GPEC-GT-18 (6-8) | GPEC-GT-18 (15-17) | GPEC-GT-18 (20-22) |
| | | | Start Depth | 45 | 75 | 100 | 0 | 6 | 15 | 20 |
| | | | End Depth | 47 | 77 | 102 | 4 | 8 | 17 | 22 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 8/25/2009 | 8/27/2009 | 8/28/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 0.84 U | 0.79 U | 0.77 U | 50 UJ | 43 UJ | 1500 UJ | 0.85 UJ |
| Hexachloroethane | | 67-72-1 | 0.34 U | 0.32 U | 0.31 U | 21 UH | 18 UJ | 300 UJ | 0.35 UJ |
| Isophorone | | 78-59-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2-Methylphenol | | 95-48-7 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 2-Nitroaniline | | 88-74-4 | 2.1 U | 2 U | 2 U | 130 UJ | 110 UJ | 3800 U | 2.2 U |
| 3-Nitroaniline | | 99-09-2 | 2.1 U | 2 U | 2 U | 130 UJ | 110 UJ | 3800 U | 2.2 U |
| 4-Nitroaniline | | 100-01-6 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 U | 0.34 U |
| Nitrobenzene | | 98-95-3 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |
| 2-Nitrophenol | | 88-75-5 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| 4-Nitrophenol | | 100-02-7 | 2.1 U | 2 U | 2 U | 130 UJ | 110 UJ | 3800 UJ | 2.2 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Pentachlorophenol | | 87-86-5 | 2.1 UJ | 2 UJ | 2 UJ | 130 UJ | 110 UJ | 3800 UJ | 2.2 U |
| Phenol | | 108-95-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 UJ |
| 2,4,5-Trichlorophenol | | 95-95-4 | 2.1 U | 2 U | 2 U | 130 UJ | 110 UJ | 3800 UJ | 2.2 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 0.34 U | 0.32 U | 0.31 U | 20 UJ | 18 UJ | 600 UJ | 0.34 U |
| Total SVOCs | | TSVOC | **0.738** | **1.961** | **0.751** | **576.1** | **243.8** | **15065** | **0.448** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.022 U | 0.02 U | 0.02 U | 0.32 UJ | 0.28 UJ | 0.076 UJ | 0.022 U |
| Aroclor 1221 | | 11104-28-2 | 0.022 U | 0.02 U | 0.02 U | 0.32 UJ | 0.28 UJ | 0.076 UJ | 0.022 U |
| Aroclor 1232 | | 11141-16-5 | 0.022 U | 0.02 U | 0.02 U | 0.32 UJ | 0.28 UJ | 0.076 UJ | 0.022 U |
| Aroclor 1242 | | 53469-21-9 | 0.022 U | 0.02 U | 0.02 U | **2.5 J** | **2.9 J** | 0.076 UJ | 0.022 U |
| Aroclor 1248 | | 12672-29-6 | 0.022 U | 0.02 U | 0.02 U | 0.32 UJ | 0.28 UJ | 0.076 UJ | 0.022 U |
| Aroclor 1254 | | 11097-69-1 | 0.022 U | 0.02 U | 0.02 U | **2.2 J** | **2.2 J** | **0.23 JN** | 0.022 U |
| Aroclor 1260 | | 11096-82-5 | 0.022 U | 0.02 U | 0.02 U | **1.3 J** | **1 J** | **0.077 J** | 0.022 UJ |
| Aroclor 1262 | | 37324-23-5 | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | ND | ND | ND | **6** | **6.1** | **0.307** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-GT16 | GPEC-GT16 | GPEC-GT16 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC GT-16 (45-47) | GPEC-GT-16 (75-77) | GPEC-GT-16 (100-102) | GPEC-GT-18 (0-4) | GPEC-GT-18 (6-8) | GPEC-GT-18 (15-17) | GPEC-GT-18 (20-22) |
| | | Start Depth | 45 | 75 | 100 | 0 | 6 | 15 | 20 |
| | | End Depth | 47 | 77 | 102 | 4 | 8 | 17 | 22 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 8/25/2009 | 8/27/2009 | 8/28/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT16 | GPEC-GT16 | GPEC-GT16 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 | GPEC-GT18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC GT-16 (45-47) | GPEC-GT-16 (75-77) | GPEC-GT-16 (100-102) | GPEC-GT-18 (0-4) | GPEC-GT-18 (6-8) | GPEC-GT-18 (15-17) | GPEC-GT-18 (20-22) |
| | | Start Depth | 45 | 75 | 100 | 0 | 6 | 15 | 20 |
| | | End Depth | 47 | 77 | 102 | 4 | 8 | 17 | 22 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 8/25/2009 | 8/27/2009 | 8/28/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 | 9/3/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **3510** | **2220** | **3600** | **19000 J** | **19200 J** | **11700 J** | **13200** |
| Antimony | | 7440-36-0 | 5.2 UJ | 4.9 UJ | 4.5 UJ | 15.3 UJ | **4.9 J** | **5.4 J** | 5.1 UJ |
| Arsenic | | 7440-38-2 | 6.6 U | 6.2 U | **7.9** | **146 J** | **160 J** | **120 J** | 6.5 U |
| Barium | | 7440-39-3 | **26.3 J** | **12.5 J** | **18.5 J** | **272 J** | **318 J** | **245 J** | **123** |
| Beryllium | | 7440-41-7 | **0.24 J** | **0.15 J** | **0.29 J** | 4.6 UJ | 4.1 UJ | **0.77 J** | **0.47 J** |
| Cadmium | | 7440-43-9 | 1.6 U | 1.5 U | 1.4 UJ | **90.2 J** | **147 J** | **6.9 J** | 1.6 U |
| Calcium | | 7440-70-2 | **12400 J** | **5650 J** | **1800 J** | **19600 J** | **19600 J** | **9850 J** | **25700** |
| Chromium | | 7440-47-3 | 8.5 UJ | 7 UJ | 8.9 UJ | **765 J** | **1180 J** | **109 J** | **31.6 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 0.8 U | **0.65 J** | **1.3** | 0.8 UJ | 0.8 UJ | 0.8 U | **0.56 J** |
| Cobalt | | 7440-48-4 | **3.8** | **2.5** | **9.7** | **32 J** | **45.7 J** | **15.6 J** | **10.4** |
| Copper | | 7440-50-8 | 8.7 UJ | 8.3 UJ | 5.7 UJ | **5970 J** | **8830 J** | **1470 J** | **28.2 J** |
| Iron | | 7439-89-6 | **8820 J** | **7730 J** | **37800 J** | **43000 J** | **40300 J** | **30400 J** | **22800** |
| Lead | | 7439-92-1 | 4.7 U | 4.4 U | **10 J** | **1240 J** | **1620 J** | **433 J** | **4.4 J** |
| Magnesium | | 7439-95-4 | **7360** | **3270** | **2920** | **14900 J** | **11300 J** | **7590 J** | **16500** |
| Manganese | | 7439-96-5 | **161** | **154** | **564** | **364 J** | **309** | **399 J** | **493** |
| Mercury | | 7439-97-6 | 0.063 U | 0.06 U | 0.055 U | **4.8 J** | **5.6 J** | **0.41 J** | **0.0069 J** |
| Nickel | | 7440-02-0 | **8.9 J** | 5.4 UJ | **18.4 J** | **1050 J** | **1560 J** | **316 J** | **25.4 J** |
| Potassium | | 7440-09-7 | **980 J** | **433 J** | **513 J** | **3940 J** | **3690 J** | **3380 J** | **4790 J** |
| Selenium | | 7782-49-2 | 11.8 U | 11.1 U | 10.3 U | 34.7 UJ | 30.5 UJ | 21.1 UJ | 11.6 UJ |
| Silver | | 7440-22-4 | 1.6 U | 1.5 U | 1.4 U | **29.1 J** | **41.1 J** | **4.8 J** | 1.6 UJ |
| Sodium | | 7440-23-5 | 684 U | 336 U | 380 U | **23200 J** | **18700 J** | **3970 J** | **1990 J** |
| Thallium | | 7440-28-0 | 4.7 U | 4.4 U | 4.1 U | 13.9 UJ | 12.2 UJ | 8.4 UJ | 4.7 UJ |
| Tin | | 7440-31-5 | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | | 7440-62-2 | **11.2** | **8.6** | **11.3** | **131 J** | **168 J** | **35.2 J** | **37.7** |
| Zinc | | 7440-66-6 | 19.9 UJ | 12 UJ | 20.4 UJ | **5370 J** | **9550 J** | **1490 J** | **60.9 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | 0.256 U | 0.238 U | 0.231 U | **0.151 J** | 0.657 UJ | **0.177 J** | 0.255 UJ |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **6710** | **4480** | **6250** | **110000** | **125000** | **243000** | **10800 J** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT18 | GPEC-GT18 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-18 (45-47) | GPEC-GT-18 (55-57) | GPEC-GT-20 (0-4) | GPEC-GT-20 (8-12) | GPEC-GT-20 (12-14) | GPEC-GT-20 (40-42) | GPEC-GT-20 (65-67) |
| | | Start Depth | 45 | 55 | 0 | 8 | 12 | 40 | 65 |
| | | End Depth | 47 | 57 | 4 | 12 | 14 | 42 | 67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/4/2009 | 9/4/2009 | 9/9/2009 | 9/9/2009 | 9/9/2009 | 9/15/2009 | 9/15/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 0.0066 U | 0.0068 U | **0.12 J** | **7.8 J** | **5.9 J** | 0.007 U | 0.006 U |
| Toluene | | 108-88-3 | 0.0066 U | 0.0068 U | **0.02 J** | **20 J** | **25 J** | 0.007 U | 0.006 U |
| Ethylbenzene | | 100-41-4 | 0.0066 U | 0.0068 U | **0.077 J** | **11 J** | **38 J** | 0.007 U | 0.006 U |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | 0.0066 U | 0.0068 U | **0.18 J** | **22 J** | **85 J** | 0.007 U | 0.006 U |
| Total BTEX | | TBTEX | ND | ND | **0.397** | **60.8** | **153.9** | ND | ND |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.027 UJ | 0.027 UJ | 0.33 UJ | 2.8 UJ | 6.2 UJ | 0.028 U | 0.024 U |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Bromodichloromethane | | 75-27-4 | 0.0066 U | 0.0068 UJ | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Bromoform | | 75-25-2 | 0.0066 U | 0.0068 UJ | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Bromomethane | | 74-83-9 | 0.013 U | 0.014 U | 0.16 UJ | 1.1 UJ | 2.5 UJ | 0.014 U | 0.012 U |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 0.0066 U | 0.0068 U | **0.087 J** | **0.21 J** | 2.5 UJ | 0.007 U | 0.006 U |
| Carbon tetrachloride | | 56-23-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 UJ | 0.006 UJ |
| Chlorobenzene | | 108-90-7 | 0.0066 U | 0.0068 U | **0.017 J** | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Chloroethane | | 75-00-3 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Chloroform | | 67-66-3 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Chloromethane | | 74-87-3 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,2-Dichloropropane | | 78-87-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.013 U | 0.014 U | 0.16 UJ | 1.1 UJ | 2.5 UJ | 0.014 U | 0.012 U |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | 0.027 U | 0.027 U | 0.33 UJ | 1.1 UJ | 2.5 UJ | 0.028 U | 0.024 U |
| Styrene | | 100-42-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Tetrachloroethene | | 127-18-4 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Trichloroethene | | 79-01-6 | 0.0066 U | 0.0068 U | 0.082 UJ | **0.56 J** | 2.5 UJ | 0.007 U | 0.006 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-GT18 | GPEC-GT18 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-18 (45-47) | GPEC-GT-18 (55-57) | GPEC-GT-20 (0-4) | GPEC-GT-20 (8-12) | GPEC-GT-20 (12-14) | GPEC-GT-20 (40-42) | GPEC-GT-20 (65-67) |
| | | Start Depth | 45 | 55 | 0 | 8 | 12 | 40 | 65 |
| | | End Depth | 47 | 57 | 4 | 12 | 14 | 42 | 67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/4/2009 | 9/4/2009 | 9/9/2009 | 9/9/2009 | 9/9/2009 | 9/15/2009 | 9/15/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.0066 U | 0.0068 U | 0.082 UJ | 1.1 UJ | 2.5 UJ | 0.007 U | 0.006 U |
| Total VOCs | | TVOC | ND | ND | **0.501** | **61.57** | **153.9** | ND | ND |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | 0.36 U | 0.37 U | **2.3 J** | **16 J** | **24 J** | 0.38 U | 0.32 U |
| Acenaphthylene | | 208-96-8 | 0.36 U | 0.37 U | **1 J** | **8.3 J** | **70 J** | 0.38 U | 0.32 U |
| Anthracene | | 120-12-7 | 0.36 U | 0.37 U | **4.9 J** | **41 J** | **74 J** | 0.38 U | 0.32 U |
| Benzo[g,h,i]perylene | | 191-24-2 | 0.36 U | 0.37 U | **2 J** | **6.8 J** | **14 J** | 0.38 U | 0.32 U |
| Fluoranthene | | 206-44-0 | 0.36 U | 0.37 U | **16 J** | **55 J** | **83 J** | 0.38 U | **0.15 J** |
| Fluorene | | 86-73-7 | 0.36 U | 0.37 U | **2.9 J** | **47 J** | **82 J** | 0.38 U | 0.32 U |
| 2-Methylnaphthalene | | 91-57-6 | 0.36 U | **0.012 J** | **3.3 J** | **180 J** | **310 J** | 0.38 U | 0.32 U |
| Naphthalene | | 91-20-3 | 0.36 UJ | **0.043 J** | **4.6 J** | **410 J** | **510 J** | 0.38 U | 0.32 U |
| Phenanthrene | | 85-01-8 | 0.36 U | 0.37 U | **12 J** | **160 J** | **230 J** | 0.38 U | **0.059 J** |
| Pyrene | | 129-00-0 | 0.36 U | **0.027 J** | **21 J** | **79 J** | **130 J** | 0.38 U | **0.11 J** |
| Benz[a]anthracene | | 56-55-3 | 0.36 U | 0.37 U | **8 J** | **31 J** | **59 J** | 0.38 U | **0.054 J** |
| Benzo[a]pyrene | | 50-32-8 | 0.36 U | 0.37 U | **6.8 J** | **25 J** | **52 J** | 0.38 U | **0.037 J** |
| Benzo[b]fluoranthene | | 205-99-2 | 0.36 U | 0.37 U | **6.7 J** | **21 J** | **36 J** | 0.38 U | **0.055 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 0.36 U | 0.37 U | **2.2 J** | **8.2 J** | **16 J** | 0.38 U | 0.32 U |
| Chrysene | | 218-01-9 | 0.36 U | 0.37 U | **9.6 J** | **34 J** | **67 J** | 0.38 U | **0.062 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 0.36 UJ | 0.37 U | 18 UJ | 31 UJ | **4.1 J** | 0.38 U | 0.32 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 0.36 UJ | 0.37 U | **2.5 J** | **7.2 J** | **14 J** | 0.38 U | **0.026 J** |
| Total PAHs | | TPAH | ND | **0.082** | **105.8** | **1129.5** | **1775.1** | ND | **0.553** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 0.39 U | 0.37 U | **140 J** | **84 J** | 33 UJ | **0.3 J** | **0.12 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Butyl benzyl phthalate | | 85-68-7 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | **0.019 J** |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 0.36 U | 0.37 U | 18 UJ | **5.5 J** | **3.6 J** | 0.38 U | 0.32 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 0.36 U | 0.37 U | 18 UJ | 31 U | 33 UJ | 0.38 U | 0.32 U |
| 4-Chloroaniline | | 106-47-8 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2-Chloronaphthalene | | 91-58-7 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2-Chlorophenol | | 95-57-8 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Dibenzofuran | | 132-64-9 | 0.36 U | 0.37 U | 18 UJ | **12 J** | **15 J** | 0.38 U | 0.32 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 1,3-Dichlorobenzene | | 541-73-1 | R | R | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 1,4-Dichlorobenzene | | 106-46-7 | R | R | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 0.89 U | 0.91 U | 43 UJ | 76 UJ | 82 UJ | 0.93 U | 0.81 U |
| 2,4-Dichlorophenol | | 120-83-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Diethyl phthalate | | 84-66-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Dimethyl phthalate | | 131-11-3 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2,4-Dimethylphenol | | 105-67-9 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Di-n-butyl phthalate | | 84-74-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 UJ | 2 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 UJ | 2 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Hexachlorobutadiene | | 87-68-3 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Location Name** | **GPEC-GT18** | **GPEC-GT18** | **GPEC-GT20** | **GPEC-GT20** | **GPEC-GT20** | **GPEC-GT20** | **GPEC-GT20** |
| | | **Sample Name** | **GPEC-GT-18 (45-47)** | **GPEC-GT-18 (55-57)** | **GPEC-GT-20 (0-4)** | **GPEC-GT-20 (8-12)** | **GPEC-GT-20 (12-14)** | **GPEC-GT-20 (40-42)** | **GPEC-GT-20 (65-67)** |
| | | **Start Depth** | **45** | **55** | **0** | **8** | **12** | **40** | **65** |
| | | **End Depth** | **47** | **57** | **4** | **12** | **14** | **42** | **67** |
| | | **Depth Unit** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| | | **Sample Date** | **9/4/2009** | **9/4/2009** | **9/9/2009** | **9/9/2009** | **9/9/2009** | **9/15/2009** | **9/15/2009** |
| | | **Parent Sample Code** | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 0.89 UJ | 0.91 UJ | 43 UJ | 76 UJ | 82 UJ | 0.93 UJ | 0.81 UJ |
| Hexachloroethane | | 67-72-1 | R | R | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Isophorone | | 78-59-1 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2-Methylphenol | | 95-48-7 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 0.36 U | 0.37 U | 18 UJ | **41 J** | 33 UJ | 0.38 U | 0.32 U |
| 2-Nitroaniline | | 88-74-4 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 U | 2 U |
| 3-Nitroaniline | | 99-09-2 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 U | 2 U |
| 4-Nitroaniline | | 100-01-6 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Nitrobenzene | | 98-95-3 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2-Nitrophenol | | 88-75-5 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 4-Nitrophenol | | 100-02-7 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 U | 2 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Pentachlorophenol | | 87-86-5 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 UJ | 2 UJ |
| Phenol | | 108-95-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.36 UJ | 0.37 UJ | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | 2.3 U | 2.3 U | 110 UJ | 190 UJ | 210 UJ | 2.4 U | 2 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 0.36 U | 0.37 U | 18 UJ | 31 UJ | 33 UJ | 0.38 U | 0.32 U |
| Total SVOCs | | TSVOC | ND | **0.082** | **245.8** | **1272** | **1793.7** | **0.3** | **0.692** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.042 U | 0.043 U | 0.53 UJ | 0.71 UJ | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1221 | | 11104-28-2 | 0.042 U | 0.043 U | 0.53 UJ | 0.71 UJ | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1232 | | 11141-16-5 | 0.042 U | 0.043 U | 0.53 UJ | 0.71 UJ | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1242 | | 53469-21-9 | 0.042 U | 0.043 U | **2.2 J** | **2.4 J** | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1248 | | 12672-29-6 | 0.042 U | 0.043 U | 0.53 UJ | 0.71 UJ | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1254 | | 11097-69-1 | 0.042 U | 0.043 U | **1.4 J** | **1.7 J** | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1260 | | 11096-82-5 | 0.042 U | 0.043 U | 0.53 UJ | 0.71 UJ | 0.63 U | 0.023 U | 0.02 U |
| Aroclor 1262 | | 37324-23-5 | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | ND | ND | **3.6** | **4.1** | ND | ND | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-GT18 | GPEC-GT18 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-18 (45-47) | GPEC-GT-18 (55-57) | GPEC-GT-20 (0-4) | GPEC-GT-20 (8-12) | GPEC-GT-20 (12-14) | GPEC-GT-20 (40-42) | GPEC-GT-20 (65-67) |
| | | Start Depth | 45 | 55 | 0 | 8 | 12 | 40 | 65 |
| | | End Depth | 47 | 57 | 4 | 12 | 14 | 42 | 67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/4/2009 | 9/4/2009 | 9/9/2009 | 9/9/2009 | 9/9/2009 | 9/15/2009 | 9/15/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT18 | GPEC-GT18 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 | GPEC-GT20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-18 (45-47) | GPEC-GT-18 (55-57) | GPEC-GT-20 (0-4) | GPEC-GT-20 (8-12) | GPEC-GT-20 (12-14) | GPEC-GT-20 (40-42) | GPEC-GT-20 (65-67) |
| | | Start Depth | 45 | 55 | 0 | 8 | 12 | 40 | 65 |
| | | End Depth | 47 | 57 | 4 | 12 | 14 | 42 | 67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/4/2009 | 9/4/2009 | 9/9/2009 | 9/9/2009 | 9/9/2009 | 9/15/2009 | 9/15/2009 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **2570** | **5890** | **21200 J** | **13200 J** | **11200 J** | **12200** | **2510** |
| Antimony | | 7440-36-0 | 5.3 UJ | 5.5 UJ | 13.2 UJ | **10.1 J** | **4.9 J** | 5.8 UJ | 4.9 UJ |
| Arsenic | | 7440-38-2 | 6.8 U | 7 U | **185 J** | **288 J** | **180 J** | 7.3 U | 6.3 U |
| Barium | | 7440-39-3 | **21.7** | **51.5** | **260 J** | **288 J** | **226 J** | **117** | **20.1** |
| Beryllium | | 7440-41-7 | 1.6 U | 1.7 U | **1.1 J** | **0.79 J** | 3 UJ | **0.68 J** | 1.5 U |
| Cadmium | | 7440-43-9 | 1.6 U | 1.7 U | **139 J** | **194 J** | **9.5 J** | 1.7 U | 1.5 U |
| Calcium | | 7440-70-2 | **11600** | **16400** | **19800 J** | **18200 J** | **6130 J** | **22600** | **7580** |
| Chromium | | 7440-47-3 | **5.9 J** | **10.6 J** | **902 J** | **1170 J** | **97.8 J** | **30.7** | **6.7** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 0.8 U | 0.8 U | 2.6 UJ | 1.7 UJ | 1.5 UJ | **0.47 J** | **0.43 J** |
| Cobalt | | 7440-48-4 | **2.6** | **6.2** | **41.6 J** | **54 J** | **15.9 J** | **11.3** | **2.5** |
| Copper | | 7440-50-8 | **6.6 J** | **17.9 J** | **10100 J** | **9920 J** | **1810 J** | **31** | **6.8** |
| Iron | | 7439-89-6 | **6060** | **13500** | **41200 J** | **43900 J** | **25400 J** | **23500** | **7500** |
| Lead | | 7439-92-1 | 4.9 UJ | 5 UJ | **1570 J** | **1320 J** | **422 J** | **8** | **2.2 J** |
| Magnesium | | 7439-95-4 | **5890** | **7100** | **12800 J** | **6780 J** | **6530 J** | **14500** | **3850** |
| Manganese | | 7439-96-5 | **115** | **314** | **331 J** | **294 J** | **283 J** | **487** | **167** |
| Mercury | | 7439-97-6 | 0.066 U | 0.063 U | **5.9 J** | **6.2 J** | **1.2 J** | **0.0096 J** | 0.059 U |
| Nickel | | 7440-02-0 | **6.9** | **15.1** | **1360 J** | **3440 J** | **447 J** | **27.9** | **6.1** |
| Potassium | | 7440-09-7 | **604 J** | **1090 J** | **3490 J** | **2550 J** | **2520 J** | **4480 J** | **568 J** |
| Selenium | | 7782-49-2 | 12.1 UJ | 12.5 UJ | 30 UJ | 21.1 UJ | **13.4 J** | 13.1 U | 11.2 U |
| Silver | | 7440-22-4 | 1.6 U | 1.7 U | **37.3 J** | **37 J** | **5.8 J** | 1.7 U | 1.5 U |
| Sodium | | 7440-23-5 | **818 J** | **209 J** | **18000 J** | **11900 J** | **9710 J** | **1270 J** | **201 J** |
| Thallium | | 7440-28-0 | 4.9 UJ | 5 UJ | 12 UJ | 8.8 UJ | 9 UJ | 5.2 U | 4.5 U |
| Tin | | 7440-31-5 | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | | 7440-62-2 | **9** | **13.7** | **139 J** | **126 J** | **40.6 J** | **34.3** | **8.3** |
| Zinc | | 7440-66-6 | **16.1 J** | **31.7 J** | **6310 J** | **9750 J** | **1510 J** | **69.3** | **10.7** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | **0.0521 J** | 0.267 U | 0.646 UJ | **0.0893 J** | **0.0968 J** | 0.273 UJ | 0.237 UJ |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **5100** | **5760** | **122000** | **153000** | **66600** | **8580** | **4100** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-SED01 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-22 (0-4) | GPEC-GT-22 (4-8) | GPEC-GT-22 (10-12) | GPEC-GT-22 (20-22) | GPEC-GT-22 (50-52) | GPEC-GT-XX-091609 | GPECSED01(0-0.33) |
| | | Start Depth | 0 | 4 | 10 | 20 | 50 | 50 | 0 |
| | | End Depth | 4 | 8 | 12 | 22 | 52 | 52 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/16/2009 | 9/16/2009 | 6/23/2010 |
| | | Parent Sample Code | | | | | | GPEC-GT-22 (50-52) | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.071 J** | **0.17 J** | **0.22 J** | 0.0067 U | 0.0061 U | 0.0059 U | **1.8 J** |
| Toluene | | 108-88-3 | 0.086 UJ | **0.012 J** | **0.08 J** | 0.0067 U | 0.0061 U | 0.0059 U | **4 J** |
| Ethylbenzene | | 100-41-4 | 0.086 UJ | 0.077 UJ | **0.16 J** | 0.0067 U | 0.0061 U | 0.0059 U | **5.2 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.08 J** | **0.17 J** | **0.43 J** | 0.0067 U | 0.0061 U | 0.0059 U | **8.5 J** |
| Total BTEX | | TBTEX | **0.151** | **0.352** | **0.89** | ND | ND | ND | **19.5** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.34 UJ | 0.5 UJ | **0.41 J** | 0.027 U | 0.0048 U | 0.024 UJ | 4.5 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Bromodichloromethane | | 75-27-4 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Bromoform | | 75-25-2 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Bromomethane | | 74-83-9 | 0.17 UJ | **0.24 J** | **0.14 J** | 0.013 U | 0.012 U | 0.012 U | 1.1 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Carbon disulfide | | 75-15-0 | **0.04 J** | **0.088 J** | **0.064 J** | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Carbon tetrachloride | | 56-23-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 UJ | 0.0061 U | 0.0059 U | 1.1 UJ |
| Chlorobenzene | | 108-90-7 | **0.017 J** | **0.049 J** | **0.13 J** | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Chloroethane | | 75-00-3 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Chloroform | | 67-66-3 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Chloromethane | | 74-87-3 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 UJ | 0.0059 UJ | 1.1 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Dibromochloromethane | | 124-48-1 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.17 UJ | 0.15 UJ | 0.14 UJ | 0.013 U | 0.012 U | 0.012 U | 1.1 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | **0.54 J** |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Methylene chloride | | 75-09-2 | 0.34 UJ | 0.097 UJ | 0.29 UJ | 0.027 U | 0.019 U | 0.024 U | 1.1 UJ |
| Styrene | | 100-42-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Tetrachloroethene | | 127-18-4 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Trichloroethene | | 79-01-6 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | 1.1 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-SED01 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-22 (0-4) | GPEC-GT-22 (4-8) | GPEC-GT-22 (10-12) | GPEC-GT-22 (20-22) | GPEC-GT-22 (50-52) | GPEC-GT-XX-091609 | GPECSED01(0-0.33) |
| | | Start Depth | 0 | 4 | 10 | 20 | 50 | 50 | 0 |
| | | End Depth | 4 | 8 | 12 | 22 | 52 | 52 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/16/2009 | 9/16/2009 | 6/23/2010 |
| | | Parent Sample Code | | | | | | GPEC-GT-22 (50-52) | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | 1.1 UJ |
| Vinyl chloride | | 75-01-4 | 0.086 UJ | 0.077 UJ | 0.072 UJ | 0.0067 U | 0.0061 U | 0.0059 U | 1.1 UJ |
| Total VOCs | | TVOC | **0.208** | **0.729** | **1.634** | ND | ND | ND | **20.04** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | 46 UJ | **7 J** | **31 J** | 0.36 U | 0.33 U | 0.32 U | **1.3 J** |
| Acenaphthylene | | 208-96-8 | **2.3 J** | **1.9 J** | **4.3 J** | 0.36 U | 0.33 U | 0.32 U | **1.6 J** |
| Anthracene | | 120-12-7 | **6.5 J** | **10 J** | **22 J** | 0.36 U | 0.33 U | 0.32 U | **7.9 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 46 UJ | **5.5 J** | **11 J** | 0.36 U | 0.33 U | 0.32 U | **5.3 J** |
| Fluoranthene | | 206-44-0 | **20 J** | **22 J** | **33 J** | **0.019 J** | **0.016 J** | **0.019 J** | **82 J** |
| Fluorene | | 86-73-7 | 46 UJ | **7.6 J** | **26 J** | 0.36 U | 0.33 U | 0.32 U | **0.98 J** |
| 2-Methylnaphthalene | | 91-57-6 | **3 J** | **12 J** | **110 J** | **0.019 J** | 0.33 U | **0.011 J** | **1.4 J** |
| Naphthalene | | 91-20-3 | 46 UJ | **8.6 J** | **210 J** | 0.36 U | 0.33 U | 0.32 U | **3.2 J** |
| Phenanthrene | | 85-01-8 | **10 J** | **40 J** | **99 J** | **0.04 J** | **0.031 J** | **0.036 J** | 6.8 UJ |
| Pyrene | | 129-00-0 | **26 J** | **39 J** | **59 J** | **0.027 J** | **0.023 J** | **0.025 J** | **91 J** |
| Benz[a]anthracene | | 56-55-3 | **11 J** | **12 J** | **16 J** | 0.36 U | 0.33 U | 0.32 U | **33 J** |
| Benzo[a]pyrene | | 50-32-8 | **10 J** | **8.9 J** | **12 J** | 0.36 U | 0.33 U | 0.32 U | **15 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **10 J** | **8.3 J** | **10 J** | 0.36 U | 0.33 U | 0.32 U | **24 J** |
| Benzo[k]fluoranthene | | 207-08-9 | **4.4 J** | **2 J** | **3.7 J** | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Chrysene | | 218-01-9 | **13 J** | **13 J** | **17 J** | 0.36 U | 0.33 U | 0.32 U | **24 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 46 UJ | **1.2 J** | 16 UJ | 0.36 U | 0.33 U | 0.32 U | **1.3 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 46 UJ | **3.7 J** | **7.2 J** | 0.36 U | 0.33 U | 0.32 U | **5.7 J** |
| Total PAHs | | TPAH | **116.2** | **202.7** | **671.2** | **0.105** | **0.07** | **0.091** | **297.68** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | 33 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | 33 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | 33 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | NA |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | 33 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **410 J** | **160 J** | **140 J** | **0.13 J** | **0.21 J** | **0.41** | **50 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | **0.023 J** | **0.035 J** | 33 UJ |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | 170 UJ |
| Carbazole | | 86-74-8 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 4-Chloroaniline | | 106-47-8 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| 2-Chlorophenol | | 95-57-8 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Dibenzofuran | | 132-64-9 | 46 UJ | **2.2 J** | **8.1 J** | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 46 UJ | **0.58 J** | 16 UJ | 0.36 U | **0.02 J** | 0.32 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 46 UJ | **0.69 J** | 16 UJ | 0.36 U | 0.33 U | 0.32 U | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 110 UJ | 20 UJ | 39 UJ | 0.89 U | 0.81 U | 0.79 U | 33 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Diethyl phthalate | | 84-66-2 | 46 UJ | 8.3 UJ | **2.1 J** | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Dimethyl phthalate | | 131-11-3 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 290 UJ | 52 UJ | 98 UJ | 2.3 UJ | 2.1 UJ | 2 UJ | 170 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 290 UJ | 52 UJ | 98 UJ | 2.3 UJ | 2.1 UJ | 2 UJ | 170 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | 67 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 46 UJ | **14 J** | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Hexachlorobutadiene | | 87-68-3 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-SED01 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-22 (0-4) | GPEC-GT-22 (4-8) | GPEC-GT-22 (10-12) | GPEC-GT-22 (20-22) | GPEC-GT-22 (50-52) | GPEC-GT-XX-091609 | GPECSED01(0-0.33) |
| | | Start Depth | 0 | 4 | 10 | 20 | 50 | 50 | 0 |
| | | End Depth | 4 | 8 | 12 | 22 | 52 | 52 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/16/2009 | 9/16/2009 | 6/23/2010 |
| | | Parent Sample Code | | | | | | GPEC-GT-22 (50-52) | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 110 UJ | 20 UJ | 39 UJ | 0.89 UJ | 0.81 UJ | 0.79 UJ | 33 UJ |
| Hexachloroethane | | 67-72-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Isophorone | | 78-59-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2-Methylphenol | | 95-48-7 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 2-Nitroaniline | | 88-74-4 | 290 UJ | 52 UJ | 98 UJ | 2.3 U | 2.1 U | 2 U | 170 UJ |
| 3-Nitroaniline | | 99-09-2 | 290 UJ | 52 UJ | 98 UJ | 2.3 U | 2.1 U | 2 U | 170 UJ |
| 4-Nitroaniline | | 100-01-6 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 170 UJ |
| Nitrobenzene | | 98-95-3 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 67 UJ |
| 2-Nitrophenol | | 88-75-5 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| 4-Nitrophenol | | 100-02-7 | 290 UJ | 52 UJ | 98 UJ | 2.3 U | 2.1 U | 2 U | 170 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Pentachlorophenol | | 87-86-5 | 290 UJ | 52 UJ | 98 UJ | 2.3 U | 2.1 UJ | 2 UJ | 33 UJ |
| Phenol | | 108-95-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 6.8 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | NA | NA | NA | NA | NA | NA | 33 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NA | NA | NA | NA | NA | NA | 33 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 290 UJ | 52 UJ | 98 UJ | 2.3 U | 2.1 U | 2 U | 33 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 46 UJ | 8.3 UJ | 16 UJ | 0.36 U | 0.33 U | 0.32 U | 33 UJ |
| Total SVOCs | | TSVOC | **526.2** | **380.17** | **821.4** | **0.235** | **0.323** | **0.536** | **347.68** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.057 UJ | 1 UJ | 0.048 UJ | 0.022 U | 0.02 U | 0.02 U | 0.86 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.057 UJ | 1 UJ | 0.048 UJ | 0.022 U | 0.02 U | 0.02 U | 0.86 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.057 UJ | 1 UJ | 0.048 UJ | 0.022 U | 0.02 U | 0.02 U | 0.86 UJ |
| Aroclor 1242 | | 53469-21-9 | **0.41 J** | **6.5 J** | **0.79 J** | 0.022 U | 0.02 U | 0.02 U | 0.86 UJ |
| Aroclor 1248 | | 12672-29-6 | 0.057 UJ | 1 UJ | 0.048 UJ | 0.022 U | 0.02 U | 0.02 U | **2 J** |
| Aroclor 1254 | | 11097-69-1 | **0.42 J** | **4.9 J** | **0.76 J** | 0.022 U | 0.02 U | 0.02 U | **2.7 J** |
| Aroclor 1260 | | 11096-82-5 | **0.16 J** | **1.2 J** | **0.15 J** | 0.022 U | 0.02 U | 0.02 U | 0.86 UJ |
| Aroclor 1262 | | 37324-23-5 | NA | NA | NA | NA | NA | NA | 0.86 UJ |
| Aroclor 1268 | | 11100-14-4 | NA | NA | NA | NA | NA | NA | 0.86 UJ |
| Total PCBs | | 1336-36-3 | **0.99** | **12.6** | **1.7** | ND | ND | ND | **4.7** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | 0.086 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-SED01 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-22 (0-4) | GPEC-GT-22 (4-8) | GPEC-GT-22 (10-12) | GPEC-GT-22 (20-22) | GPEC-GT-22 (50-52) | GPEC-GT-XX-091609 | GPECSED01(0-0.33) |
| | | Start Depth | 0 | 4 | 10 | 20 | 50 | 50 | 0 |
| | | End Depth | 4 | 8 | 12 | 22 | 52 | 52 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/16/2009 | 9/16/2009 | 6/23/2010 |
| | | Parent Sample Code | | | | | | GPEC-GT-22 (50-52) | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | **0.097 J** |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | **0.11 J** |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | **0.072 J** |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | **0.022 J** |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | **0.039 J** |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | 0.17 UJ |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | 0.086 UJ |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | 3.4 UJ |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | 3.4 UJ |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | **0.34** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | 36 UJ |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | 0.36 UJ |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | 0.36 UJ |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | 0.18 UJ |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | 0.36 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | 0.4 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-GT22 | GPEC-SED01 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-GT-22 (0-4) | GPEC-GT-22 (4-8) | GPEC-GT-22 (10-12) | GPEC-GT-22 (20-22) | GPEC-GT-22 (50-52) | GPEC-GT-XX-091609 | GPECSED01(0-0.33) |
| | | Start Depth | 0 | 4 | 10 | 20 | 50 | 50 | 0 |
| | | End Depth | 4 | 8 | 12 | 22 | 52 | 52 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/15/2009 | 9/16/2009 | 9/16/2009 | 6/23/2010 |
| | | Parent Sample Code | | | | | | GPEC-GT-22 (50-52) | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | 0.054 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | 36 UJ |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | 0.089 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | 0.089 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **15600 J** | **18400 J** | **15300 J** | **12400** | **2600** | **2770** | **16200 J** |
| Antimony | | 7440-36-0 | **6.5 J** | **16.9 J** | **29.6 J** | 5.5 UJ | 5 UJ | 4.9 UJ | **3.8 J** |
| Arsenic | | 7440-38-2 | **110 J** | **221 J** | **321 J** | 7 U | 6.3 U | 6.2 U | **45.6 J** |
| Barium | | 7440-39-3 | **239 J** | **377 J** | **398 J** | **120** | **25.4** | **18** | **226 J** |
| Beryllium | | 7440-41-7 | 4.2 UJ | **1.5 J** | **1.4 J** | **0.68 J** | 1.5 U | 1.5 U | **0.86 J** |
| Cadmium | | 7440-43-9 | **60.5 J** | **154 J** | **168 J** | 1.7 U | 1.5 U | 1.5 U | **35.3 J** |
| Calcium | | 7440-70-2 | **17600 J** | **24700 J** | **24000 J** | **29300** | **7940** | **11100** | **14000 J** |
| Chromium | | 7440-47-3 | **524 J** | **1420 J** | **1300 J** | **30.6** | **8.1** | **7.4** | **355 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 15.9 UJ | 12.6 UJ | 14.3 UJ | 1 U | **0.54 J** | **0.85 J** | NA |
| Cobalt | | 7440-48-4 | **23.4 J** | **56.1 J** | **55.1 J** | **10.9** | **3** | **3** | **16.2 J** |
| Copper | | 7440-50-8 | **5820 J** | **11100 J** | **12900 J** | **33** | **6.5** | **10.1** | **2210 J** |
| Iron | | 7439-89-6 | **37400 J** | **44100 J** | **44000 J** | **21800** | **9350** | **8800** | **35100 J** |
| Lead | | 7439-92-1 | **950 J** | **1590 J** | **1570 J** | **7** | **2.4 J** | **2.7 J** | **757 J** |
| Magnesium | | 7439-95-4 | **12200 J** | **8930 J** | **7110 J** | **17800** | **3780** | **5690** | **13300 J** |
| Manganese | | 7439-96-5 | **309 J** | **361 J** | **407 J** | **541** | **210** | **190** | **265 J** |
| Mercury | | 7439-97-6 | **4.4 J** | **7.8 J** | **8 J** | **0.01 J** | 0.061 U | 0.058 U | **0.776 J** |
| Nickel | | 7440-02-0 | **720 J** | **2120 J** | **3050 J** | **26.4** | **6.8** | **7.4** | **322 J** |
| Potassium | | 7440-09-7 | **3070 J** | **2760 J** | **2360 J** | **4590 J** | **488 J** | **689 J** | **4000 J** |
| Selenium | | 7782-49-2 | **10.6 J** | **19.8 J** | **17.8 J** | 12.5 U | 11.3 U | 11.1 U | **6.2 J** |
| Silver | | 7440-22-4 | **26.2 J** | **50.5 J** | **45.7 J** | 1.7 U | 1.5 U | 1.5 U | **15.2 J** |
| Sodium | | 7440-23-5 | **9280 J** | **4970 J** | **4130 J** | **995 J** | **274 J** | **1090 J** | **23100 J** |
| Thallium | | 7440-28-0 | 12.6 UJ | 11.1 UJ | 10.7 UJ | 5 U | 4.5 U | 4.5 U | **0.67 J** |
| Tin | | 7440-31-5 | NA | NA | NA | NA | NA | NA | **63.3 J** |
| Vanadium | | 7440-62-2 | **94.4 J** | **143 J** | **137 J** | **36.1** | **10.1** | **9.9** | **80.1 J** |
| Zinc | | 7440-66-6 | **3660 J** | **9420 J** | **10700 J** | **66** | **15.6** | **16** | **2290 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | 0.68 UJ | 0.614 UJ | 0.571 UJ | 0.266 UJ | 0.241 UJ | 0.236 UJ | NA |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | **7.6 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | 112 UJ |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | **8930 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | 4.5 UJ |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | **7.5 J** |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | **6390 J** |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | **6770 J** |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | **6770 J** |
| Total Organic Carbon | | TOC | **104000** | **132000** | **160000** | **11300** | **6290** | **6540** | **92900 J** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | **1550 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED01(0.33-0.66) | GPECSED01(0.66-1.97) | GPECSED01(1.97-3.28) | GPECSED01(3.28-6.56) | GPECSED01(6.56-8.5) | GPECSED01(8.5-12.5 NSU) | GPECSED02(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 12.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | NA | **0.75 J** | NA | **0.43 J** |
| Toluene | | 108-88-3 | NA | NA | NA | NA | **0.23 J** | NA | **0.53 J** |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | NA | **3.8 J** | NA | **2 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | NA | **4.6 J** | NA | **2.9 J** |
| Total BTEX | | TBTEX | NA | NA | NA | NA | **9.38** | NA | **5.86** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | NA | 3.3 UJ | NA | 4.8 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Bromoform | | 75-25-2 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Bromomethane | | 74-83-9 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Chloroethane | | 75-00-3 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Chloroform | | 67-66-3 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Chloromethane | | 74-87-3 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | **0.63 J** | NA | **0.28 J** |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | **0.53 J** | NA | **0.32 J** |
| Methylene chloride | | 75-09-2 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Styrene | | 100-42-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Trichloroethene | | 79-01-6 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED01(0.33-0.66) | GPECSED01(0.66-1.97) | GPECSED01(1.97-3.28) | GPECSED01(3.28-6.56) | GPECSED01(6.56-8.5) | GPECSED01(8.5-12.5 NSU) | GPECSED02(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 12.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | NA | 0.83 UJ | NA | 1.2 UJ |
| Total VOCs | | TVOC | NA | NA | NA | NA | **10.54** | NA | **6.46** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **4.4 J** | **5.5 J** | **8.6 J** | **39 J** | **190 J** | **27** | 7.7 UJ |
| Acenaphthylene | | 208-96-8 | **2.6 J** | **3.3 J** | **3.6 J** | **8.2 J** | **22 J** | **3.1** | **3.3 J** |
| Anthracene | | 120-12-7 | **6.3 J** | **7.1 J** | **12 J** | **35 J** | **120 J** | **18** | 7.7 UJ |
| Benzo[g,h,i]perylene | | 191-24-2 | **6.9 J** | **6 J** | **6.8 J** | **11 J** | **29 J** | **3.8 J** | **5.2 J** |
| Fluoranthene | | 206-44-0 | **21 J** | **20 J** | **25 J** | **50 J** | **140 J** | **19** | **17 J** |
| Fluorene | | 86-73-7 | **1.1 J** | **3.1 J** | **7.9 J** | **34 J** | **120 J** | **17** | 7.7 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **2.2 J** | **2.9 J** | **12 J** | **82 J** | **540 J** | **72** | 7.7 UJ |
| Naphthalene | | 91-20-3 | **6.4 J** | **9.4 J** | **30 J** | **120 J** | **1400 J** | **180** | **5 J** |
| Phenanthrene | | 85-01-8 | 6.5 UJ | **9.6 J** | **32 J** | **130 J** | **510 J** | **68** | 7.7 UJ |
| Pyrene | | 129-00-0 | **38 J** | **42 J** | **49 J** | **110 J** | **300 J** | **41** | **20 J** |
| Benz[a]anthracene | | 56-55-3 | **22 J** | **16 J** | **20 J** | **39 J** | **94 J** | **13** | **8.2 J** |
| Benzo[a]pyrene | | 50-32-8 | **13 J** | **13 J** | **12 J** | **23 J** | **64 J** | **8.9** | **9 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **17 J** | **10 J** | **13 J** | **24 J** | **58 J** | **8.5** | **11 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Chrysene | | 218-01-9 | **19 J** | **18 J** | **17 J** | **33 J** | **78 J** | **12** | **5.3 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 6.5 UJ | 7.3 UJ | 5.7 UJ | **3.1 J** | **4.8 J** | **0.62 J** | 7.7 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.5 J** | **3.5 J** | **5.1 J** | **9 J** | **21 J** | **2.8 J** | **4.9 J** |
| Total PAHs | | TPAH | **163.4** | **169.4** | **254** | **750.3** | **3690.8** | **494.72** | **88.9** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | **18 J** | **2.7 J** | 38 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **280 J** | **610 J** | **350 J** | **220 J** | **130 J** | **18 J** | **110 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Caprolactam | | 105-60-2 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| Carbazole | | 86-74-8 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | **7.3 J** | **1.3 J** | 7.7 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 4-Chloroaniline | | 106-47-8 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| 2-Chlorophenol | | 95-57-8 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Dibenzofuran | | 132-64-9 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | **37 J** | **5.1 J** | 38 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Diethyl phthalate | | 84-66-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Dimethyl phthalate | | 131-11-3 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 1,4-Dioxane | | 123-91-1 | 64 UJ | 72 UJ | 57 UJ | 52 UJ | 51 UJ | 22 UJ | 77 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 32 UJ | 36 UJ | **5.7 J** | **6.9 J** | 25 UJ | 11 U | 38 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Hexachlorobutadiene | | 87-68-3 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED01(0.33-0.66) | GPECSED01(0.66-1.97) | GPECSED01(1.97-3.28) | GPECSED01(3.28-6.56) | GPECSED01(6.56-8.5) | GPECSED01(8.5-12.5 NSU) | GPECSED02(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 12.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 UJ | 38 UJ |
| Hexachloroethane | | 67-72-1 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Isophorone | | 78-59-1 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2-Methylphenol | | 95-48-7 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2-Nitroaniline | | 88-74-4 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| 3-Nitroaniline | | 99-09-2 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| 4-Nitroaniline | | 100-01-6 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| Nitrobenzene | | 98-95-3 | 64 UJ | 72 UJ | 57 UJ | 52 UJ | 51 UJ | 22 U | 77 UJ |
| 2-Nitrophenol | | 88-75-5 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 4-Nitrophenol | | 100-02-7 | 160 UJ | 180 UJ | 150 UJ | 130 UJ | 130 UJ | 57 U | 200 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Pentachlorophenol | | 87-86-5 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Phenol | | 108-95-2 | 6.5 UJ | 7.3 UJ | 5.7 UJ | 5.2 UJ | 5.1 UJ | 2.3 U | 7.7 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 32 UJ | 36 UJ | 28 UJ | 26 UJ | 25 UJ | 11 U | 38 UJ |
| Total SVOCs | | TSVOC | **443.4** | **779.4** | **609.7** | **977.2** | **3883.1** | **521.82** | **198.9** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1248 | | 12672-29-6 | **4 J** | **4.7 J** | **7.4 J** | **10 J** | **8.9 J** | **0.083 J** | **2.8 J** |
| Aroclor 1254 | | 11097-69-1 | **5.3 J** | **6.6 J** | **8.5 J** | **12 J** | **10 J** | **0.11 J** | **4 J** |
| Aroclor 1260 | | 11096-82-5 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.82 UJ | 0.89 UJ | 0.71 UJ | 0.65 UJ | 0.63 UJ | 0.28 UJ | 0.94 UJ |
| Total PCBs | | 1336-36-3 | **9.3** | **11.3** | **15.9** | **22** | **18.9** | **0.193** | **6.8** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **4400 J** | NA | NA | NA | NA | **260** | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **1900 J** | NA | NA | NA | NA | **75** | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **3500 J** | NA | NA | NA | NA | **200** | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **79 J** | NA | NA | NA | NA | **7.1 J** | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **3600 J** | NA | NA | NA | NA | **150** | NA |
| Total HxCDF | | 55684-94-1 | **2400 J** | NA | NA | NA | NA | **160** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **290 J** | NA | NA | NA | NA | **20 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | 180 UJ | NA | NA | NA | NA | **1.2 J** | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **780 J** | NA | NA | NA | NA | **31** | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **510 J** | NA | NA | NA | NA | **34 J** | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **39 J** | NA | NA | NA | NA | **2.0 J** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **110 J** | NA | NA | NA | NA | **3.1 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **69 J** | NA | NA | NA | NA | **3.4 J** | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **100 J** | NA | NA | NA | NA | **6.3 J** | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **2900 J** | NA | NA | NA | NA | **130** | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **18000 J** | NA | NA | NA | NA | **1100** | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **1600 J** | NA | NA | NA | NA | **140** | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **110 J** | NA | NA | NA | NA | **8.5 J** | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **340 J** | NA | NA | NA | NA | **7.6** | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **29 J** | NA | NA | NA | NA | 50 U | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **160 J** | NA | NA | NA | NA | **16 J** | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **1400 J** | NA | NA | NA | NA | **120** | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **170 J** | NA | NA | NA | NA | **7.6** | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **98 J** | NA | NA | NA | NA | **8.4 J** | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **16 J** | NA | NA | NA | NA | 9.9 U | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.082 UJ | 0.088 UJ | **0.15 JN** | **0.33 J** | **0.19 JN** | 0.028 UJ | 0.094 UJ |
| alpha-bhc | | 319-84-6 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| beta-BHC | | 319-85-7 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED01(0.33-0.66) | GPECSED01(0.66-1.97) | GPECSED01(1.97-3.28) | GPECSED01(3.28-6.56) | GPECSED01(6.56-8.5) | GPECSED01(8.5-12.5 NSU) | GPECSED02(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 12.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| delta-BHC | | 319-86-8 | 0.082 UJ | 0.088 UJ | **0.14 JN** | **0.15 JN** | **0.16 JN** | 0.028 UJ | **0.085 J** |
| alpha-chlordane | | 5103-71-9 | **0.17 J** | **0.2 J** | **0.29 J** | **0.3 J** | **0.3 J** | 0.028 UJ | 0.094 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.25 J** | **0.3 J** | **0.49 J** | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.11 JN** | 0.088 UJ | 0.071 UJ | **0.096 JN** | **0.11 JN** | 0.028 UJ | 0.094 UJ |
| o,p'-DDE | | 3424-82-6 | 0.082 UJ | 0.088 UJ | 0.071 UJ | **0.12 JN** | **0.12 JN** | **0.0038 J** | 0.094 UJ |
| 4,4'-DDE | | 72-55-9 | **0.12 JN** | **0.15 JN** | **0.19 JN** | **0.32 JN** | **0.35 JN** | 0.028 UJ | 0.094 UJ |
| o,p'-DDT | | 789-02-6 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| 4,4'-DDT | | 50-29-3 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | **0.17 J** |
| Dieldrin | | 60-57-1 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Endosulfan I | | 959-98-8 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Endosulfan II | | 33213-65-9 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 U |
| Endosulfan sulfate | | 1031-07-8 | 0.082 UJ | 0.088 UJ | 0.071 UJ | **0.084 JN** | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Endrin | | 72-20-8 | **0.17 J** | **0.22 J** | **0.32 J** | **0.44 J** | **0.41 J** | 0.028 UJ | 0.094 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Endrin ketone | | 53494-70-5 | **0.084 JN** | 0.088 UJ | **0.071 JN** | **0.11 JN** | **0.12 JN** | 0.028 UJ | 0.094 UJ |
| Heptachlor | | 76-44-8 | 0.082 UJ | 0.088 UJ | **0.12 JN** | **0.2 JN** | **0.16 JN** | 0.028 UJ | 0.094 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.082 UJ | 0.088 UJ | **0.088 JN** | **0.16 JN** | **0.15 JN** | 0.028 UJ | 0.094 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| Methoxychlor | | 72-43-5 | 0.16 UJ | 0.18 UJ | 0.14 UJ | 0.13 UJ | 0.12 UJ | 0.056 UJ | 0.19 UJ |
| Mirex | | 2385-85-5 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | **0.091 J** | 0.028 UJ | 0.094 UJ |
| Mitotane | | 53-19-0 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.082 UJ | 0.088 UJ | 0.071 UJ | 0.065 UJ | 0.062 UJ | 0.028 UJ | 0.094 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.3 UJ | 3.5 UJ | 2.9 UJ | 2.6 UJ | 2.5 UJ | 1.1 UJ | 3.8 UJ |
| Toxaphene | | 8001-35-2 | 3.3 UJ | 3.5 UJ | 2.9 UJ | 2.6 UJ | 2.5 UJ | 1.1 UJ | 3.8 UJ |
| Total Pesticides | | TPEST | **0.904** | **0.87** | **1.859** | **2.31** | **2.161** | **0.0038** | **0.255** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.009** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.014** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.0083** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.0012** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.019** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | **0.0011 J** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.008** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.00072 J** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | 0.00045 UJ | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | 0.00045 UJ | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.0023** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | **0.0024 J** | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | 0.00045 U | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.0042** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | **0.0024** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.0031** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.11 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.07572** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 33 UJ | 36 UJ | 29 UJ | 26 UJ | 27 UJ | 11 U | 38 UJ |
| 2,4-D | | 94-75-7 | 0.33 UJ | 0.36 UJ | 0.29 UJ | 0.26 UJ | 0.27 UJ | 0.11 U | 0.38 UJ |
| 2,4-DB | | 94-82-6 | 0.33 UJ | 0.36 UJ | 0.29 UJ | 0.26 UJ | 0.27 UJ | 0.11 U | 0.38 UJ |
| Dicamba | | 1918-00-9 | 0.17 UJ | 0.18 UJ | 0.14 UJ | 0.13 UJ | 0.13 UJ | 0.056 U | 0.19 UJ |
| Dichloroprop | | 120-36-5 | 0.33 UJ | 0.36 UJ | 0.29 UJ | 0.26 UJ | 0.27 UJ | 0.11 U | 0.38 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.38 UJ | 0.41 UJ | 0.32 UJ | 0.29 UJ | 0.3 UJ | 0.13 U | 0.43 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED01 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED01(0.33-0.66) | GPECSED01(0.66-1.97) | GPECSED01(1.97-3.28) | GPECSED01(3.28-6.56) | GPECSED01(6.56-8.5) | GPECSED01(8.5-12.5 NSU) | GPECSED02(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.5 | 12.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.05 UJ | 0.054 UJ | 0.043 UJ | 0.039 UJ | 0.04 UJ | 0.017 U | 0.058 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 33 UJ | 36 UJ | 29 UJ | 26 UJ | 27 UJ | 11 U | 38 UJ |
| Silvex | | 93-72-1 | 0.083 UJ | 0.09 UJ | 0.071 UJ | 0.065 UJ | 0.067 UJ | 0.028 U | 0.096 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.083 UJ | 0.09 UJ | 0.071 UJ | 0.065 UJ | 0.067 UJ | 0.028 U | 0.096 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00043 UJ | 0.00045 UJ | 0.00036 UJ | 0.00032 UJ | 0.00033 UJ | 0.00014 UJ | **0.00041 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **15500 J** | **18800 J** | **16000 J** | **15400 J** | **14700 J** | **5050** | **14500 J** |
| Antimony | | 7440-36-0 | **6.9 J** | **7.8 J** | **12.8 J** | **28 J** | **25 J** | 0.14 UJ | **4.2 J** |
| Arsenic | | 7440-38-2 | **85.9 J** | **104 J** | **123 J** | **211 J** | **204 J** | **3.4 J** | **49.6 J** |
| Barium | | 7440-39-3 | **268 J** | **301 J** | **279 J** | **375 J** | **348 J** | **30.9 J** | **215 J** |
| Beryllium | | 7440-41-7 | **0.98 J** | **1.1 J** | **1.1 J** | **1.2 J** | **1.2 J** | **0.21** | **0.8 J** |
| Cadmium | | 7440-43-9 | **86.8 J** | **104 J** | **154 J** | **267 J** | **202 J** | **1.2 J** | **45.2 J** |
| Calcium | | 7440-70-2 | **13000 J** | **16700 J** | **14700 J** | **16900 J** | **15900 J** | **18300 J** | **14200 J** |
| Chromium | | 7440-47-3 | **770 J** | **913 J** | **1240 J** | **2070 J** | **1840 J** | **23.1** | **387 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **24.1 J** | **28.3 J** | **36.3 J** | **55.3 J** | **48.7 J** | **6.2 J** | **16.7 J** |
| Copper | | 7440-50-8 | **4100 J** | **5300 J** | **7560 J** | **10700 J** | **9370 J** | **61.8 J** | **2480 J** |
| Iron | | 7439-89-6 | **37200 J** | **46600 J** | **41900 J** | **44900 J** | **41000 J** | **11100** | **33200 J** |
| Lead | | 7439-92-1 | **1180 J** | **1400 J** | **1670 J** | **1810 J** | **1700 J** | **15.3 J** | **756 J** |
| Magnesium | | 7439-95-4 | **10400 J** | **12400 J** | **8490 J** | **7190 J** | **6720 J** | **9270** | **12100 J** |
| Manganese | | 7439-96-5 | **270 J** | **330 J** | **277 J** | **273 J** | **258 J** | **223 J** | **236 J** |
| Mercury | | 7439-97-6 | **6.31 J** | **8.76 J** | **9.25 J** | **10.3 J** | **6.63 J** | **0.0441** | **0.613 J** |
| Nickel | | 7440-02-0 | **717 J** | **849 J** | **1250 J** | **2740 J** | **2410 J** | **27** | **387 J** |
| Potassium | | 7440-09-7 | **3140 J** | **3540 J** | **2730 J** | **2520 J** | **2370 J** | **1620** | **3760 J** |
| Selenium | | 7782-49-2 | **8.7 J** | **10.5 J** | **12.8 J** | **16 J** | **15.5 J** | **0.59 J** | **6.1 J** |
| Silver | | 7440-22-4 | **25.3 J** | **30 J** | **38.5 J** | **50.8 J** | **43.3 J** | **0.28 J** | **16.4 J** |
| Sodium | | 7440-23-5 | **12600 J** | **12100 J** | **6370 J** | **4240 J** | **3990 J** | **525 J** | **25000 J** |
| Thallium | | 7440-28-0 | **0.7 J** | **0.81 J** | **0.82 J** | **0.82 J** | **0.89 J** | **0.14 J** | **0.73 J** |
| Tin | | 7440-31-5 | **84.1 J** | **104 J** | **111 J** | **144 J** | **133 J** | 0.35 U | **63.4 J** |
| Vanadium | | 7440-62-2 | **99 J** | **126 J** | **154 J** | **110 J** | **81.5 J** | **21.4 J** | **74.8 J** |
| Zinc | | 7440-66-6 | **6040 J** | **7220 J** | **10300 J** | **17000 J** | **14400 J** | **94.6 J** | **2770 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **13 J** | **1.6 J** | **4.1 J** | **16.9 J** | **5.1 J** | 0.70 UJ | 2.4 UJ |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **679 J** | **1110 J** | **557 J** | **874 J** | **598 J** | 35.0 U | 120 UJ |
| Black Carbon | | BC | **8860 J** | **9610 J** | **11100 J** | **14900 J** | **18600 J** | **9930 J** | **8280 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 4.3 UJ | 4.5 UJ | 3.6 UJ | 3.2 UJ | 3.3 UJ | 1.4 U | **1.6 J** |
| pH (s.u.) | | pH | **7.8 J** | **7.8 J** | **7.8 J** | **7.8 J** | **7.8 J** | **8.5 J** | **7.9 J** |
| Sulfide | | 18496-25-8 | **7120 J** | **14000 J** | **7980 J** | **15000 J** | **13400 J** | **258** | **7260 J** |
| Total Kjeldahl Nitrogen | | TKN | **5500 J** | **7370 J** | **6220 J** | **7080 J** | **9360 J** | **1460 J** | **4450 J** |
| Total Nitrogen | | 7727-37-9 | **5500 J** | **7370 J** | **6220 J** | **7080 J** | **9360 J** | **1460 J** | **4450 J** |
| Total Organic Carbon | | TOC | **92000 J** | **102000 J** | **122000 J** | **143000 J** | **163000 J** | **11700 J** | **96300 J** |
| Total Phosphorous | | 7723-14-0 | **60.2 J** | **2170 J** | **4670 J** | **3120 J** | **2390 J** | **509 J** | **20.8 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED02(0.33-0.66) | GPECSED02(0.66-1.97) | GPECSED02(1.97-3.28) | GPECSED02(3.28-6.56) | GPECSED02(6.56-9.48) | GPECSED02(9.48-10.75) | GPECSED02(10.75-16.1 NSU) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 16.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | **0.65 J** | **1.5 J** | **2.8** | NA |
| Toluene | | 108-88-3 | NA | NA | NA | **1.1 J** | **2.1 J** | **6.7** | NA |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | **15 J** | **4.5 J** | **9.5** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | **25 J** | **7.1 J** | **15** | NA |
| Total BTEX | | TBTEX | NA | NA | NA | **41.75** | **15.2** | **34** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | 3.5 UJ | 2.5 UJ | 2 U | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Bromoform | | 75-25-2 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Bromomethane | | 74-83-9 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 2-Butanone | | 78-93-3 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | **0.38 J** | 0.62 UJ | 0.49 U | NA |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | **0.24 J** | 0.62 UJ | 0.49 U | NA |
| Chloroethane | | 75-00-3 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Chloroform | | 67-66-3 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Chloromethane | | 74-87-3 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Cyclohexane | | 110-82-7 | NA | NA | NA | **0.46 J** | **0.14 J** | 0.49 U | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | **0.19 J** | 0.62 UJ | 0.49 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | **0.13 J** | 0.62 UJ | 0.49 U | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | **2.9 J** | **0.5 J** | **1.1** | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | **0.69 J** | 0.62 UJ | 0.49 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | **2.1 J** | **0.73 J** | **0.3 J** | NA |
| Methylene chloride | | 75-09-2 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Styrene | | 100-42-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Trichloroethene | | 79-01-6 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED02(0.33-0.66) | GPECSED02(0.66-1.97) | GPECSED02(1.97-3.28) | GPECSED02(3.28-6.56) | GPECSED02(6.56-9.48) | GPECSED02(9.48-10.75) | GPECSED02(10.75-16.1 NSU) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 16.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | 0.87 UJ | 0.62 UJ | 0.49 U | NA |
| Total VOCs | | TVOC | NA | NA | NA | **48.84** | **16.57** | **35.4** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **9.6 J** | **11 J** | **18 J** | **11 J** | **1300 J** | **1400** | **20** |
| Acenaphthylene | | 208-96-8 | **6.9 J** | **4.3 J** | **6.7 J** | **6.2 J** | **220 J** | **220** | **2.6** |
| Anthracene | | 120-12-7 | **12 J** | **13 J** | **21 J** | **15 J** | **840 J** | **910** | **12** |
| Benzo[g,h,i]perylene | | 191-24-2 | **6.7 J** | **7.3 J** | **6.8 J** | **8.2 J** | **230 J** | **230 J** | **4.2 J** |
| Fluoranthene | | 206-44-0 | **36 J** | **31 J** | **37 J** | **31 J** | **1700 J** | **1800** | **24** |
| Fluorene | | 86-73-7 | **2.1 J** | **8 J** | **14 J** | **12 J** | **1100 J** | **1200** | **15** |
| 2-Methylnaphthalene | | 91-57-6 | **3.9 J** | **7.1 J** | **33 J** | **30 J** | **2100 J** | **2200** | **31** |
| Naphthalene | | 91-20-3 | **10 J** | **14 J** | **56 J** | **35 J** | **9500 J** | **8000** | **110** |
| Phenanthrene | | 85-01-8 | **8.9 J** | **31 J** | **72 J** | **65 J** | **4500 J** | **3600** | **48** |
| Pyrene | | 129-00-0 | **43 J** | **42 J** | **56 J** | **44 J** | **1500 J** | **2000** | **29** |
| Benz[a]anthracene | | 56-55-3 | **20 J** | **17 J** | **22 J** | **17 J** | **710 J** | **800** | **12** |
| Benzo[a]pyrene | | 50-32-8 | **13 J** | **11 J** | **15 J** | **12 J** | **500 J** | **630** | **9.5** |
| Benzo[b]fluoranthene | | 205-99-2 | **12 J** | **10 J** | **17 J** | **13 J** | **610 J** | **770** | **13** |
| Benzo[k]fluoranthene | | 207-08-9 | **4.7 J** | **5.2 J** | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Chrysene | | 218-01-9 | **18 J** | **17 J** | **20 J** | **18 J** | **540 J** | **680** | **10** |
| Dibenz[a,h]anthracene | | 53-70-3 | 7.4 UJ | **2.2 J** | 5.2 UJ | 5.5 UJ | **59 J** | **23 J** | **1.2 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **6.5 J** | **6 J** | **5.4 J** | **3.9 J** | **200 J** | **200 J** | **3.4 J** |
| Total PAHs | | TPAH | **213.3** | **237.1** | **399.9** | **321.3** | **25609** | **24663** | **344.9** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 36 UJ | 33 UJ | **5.8 J** | **4.5 J** | **280 J** | **290 J** | **4 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **540 J** | **370 J** | **180 J** | **150 J** | **14 J** | 1300 U | 19 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Butyl benzyl phthalate | | 85-68-7 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Caprolactam | | 105-60-2 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| Carbazole | | 86-74-8 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | **230 J** | **320** | **4.8** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 4-Chloroaniline | | 106-47-8 | 36 UJ | **2.9 J** | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2-Chloronaphthalene | | 91-58-7 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| 2-Chlorophenol | | 95-57-8 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Dibenzofuran | | 132-64-9 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | **560 J** | **660** | **8.3 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2,4-Dichlorophenol | | 120-83-2 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Diethyl phthalate | | 84-66-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Dimethyl phthalate | | 131-11-3 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2,4-Dimethylphenol | | 105-67-9 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | **16 J** | 630 U | 9.5 U |
| Di-n-butyl phthalate | | 84-74-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| 2,4-Dinitrophenol | | 51-28-5 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 1,4-Dioxane | | 123-91-1 | 73 UJ | 66 UJ | 52 UJ | 54 UJ | 160 UJ | 1300 UJ | 19 UJ |
| Di-n-octyl phthalate | | 117-84-0 | **4 J** | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Hexachlorobutadiene | | 87-68-3 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED02(0.33-0.66) | GPECSED02(0.66-1.97) | GPECSED02(1.97-3.28) | GPECSED02(3.28-6.56) | GPECSED02(6.56-9.48) | GPECSED02(9.48-10.75) | GPECSED02(10.75-16.1 NSU) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 16.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 UJ | 9.5 UJ |
| Hexachloroethane | | 67-72-1 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Isophorone | | 78-59-1 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2-Methylphenol | | 95-48-7 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2-Nitroaniline | | 88-74-4 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| 3-Nitroaniline | | 99-09-2 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| 4-Nitroaniline | | 100-01-6 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| Nitrobenzene | | 98-95-3 | 73 UJ | 66 UJ | 52 UJ | 54 UJ | 160 UJ | 1300 U | 19 U |
| 2-Nitrophenol | | 88-75-5 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 4-Nitrophenol | | 100-02-7 | 190 UJ | 170 UJ | 130 UJ | 140 UJ | 400 UJ | 3200 U | 49 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Pentachlorophenol | | 87-86-5 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Phenol | | 108-95-2 | 7.4 UJ | 6.6 UJ | 5.2 UJ | 5.5 UJ | 16 UJ | 130 U | 1.9 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 36 UJ | 33 UJ | 26 UJ | 27 UJ | 77 UJ | 630 U | 9.5 U |
| Total SVOCs | | TSVOC | **757.3** | **610** | **585.7** | **475.8** | **26709** | **25933** | **362** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1248 | | 12672-29-6 | **4.9 J** | **6 J** | **11 J** | **8 J** | **1.2 J** | **0.97 J** | 0.24 UJ |
| Aroclor 1254 | | 11097-69-1 | **6.1 J** | **7.4 J** | **13 J** | **10 J** | **2.3 J** | **0.75 J** | 0.24 UJ |
| Aroclor 1260 | | 11096-82-5 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.93 UJ | 0.81 UJ | 0.61 UJ | 0.69 UJ | 0.49 UJ | 0.4 U | 0.24 UJ |
| Total PCBs | | 1336-36-3 | **11** | **13.4** | **24** | **18** | **3.5** | **1.72** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | **18000 J** | **70000 J** | NA | NA | **490 J** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | **4400 J** | **4100 J** | NA | NA | **110 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | **15000 J** | **62000 J** | NA | NA | **390 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | **280 J** | **830 J** | NA | NA | **21 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | **8400 J** | **8400 J** | NA | NA | **230 J** |
| Total HxCDF | | 55684-94-1 | NA | NA | **11000 J** | **44000 J** | NA | NA | **400 J** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | **1300 J** | **6200 J** | NA | NA | **45 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | **15 J** | **30 J** | NA | NA | **2.3 J** |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | **1600 J** | **2200 J** | NA | NA | **110 J** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | **2400 J** | **11000 J** | NA | NA | **85 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | **65 J** | **93 J** | NA | NA | **3.6 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | **190 J** | **240 J** | NA | NA | **9.1 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | **110 J** | **140 J** | NA | NA | **5.7 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | **300 J** | **1000 J** | NA | NA | **34 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | **9400 J** | **34000 J** | NA | NA | **200 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | **44000 J** | **40000 J** | NA | NA | **4000 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | **6200 J** | **25000 J** | NA | NA | **350 J** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | **350 J** | **1100 J** | NA | NA | **29 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | **580 J** | **1100 J** | NA | NA | **70 J** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | **58 J** | **140 J** | NA | NA | **4.6 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | **730 J** | **3600 J** | NA | NA | **32 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | **5000 J** | **17000 J** | NA | NA | **330 J** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | **410 J** | **920 J** | NA | NA | **36 J** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | **260 J** | **600 J** | NA | NA | **27 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | **60 J** | **150 J** | NA | NA | **1.6 J** |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.093 UJ | **0.11 JN** | **0.32 JN** | **0.23 J** | 0.049 UJ | 0.04 U | 0.024 UJ |
| alpha-bhc | | 319-84-6 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| beta-BHC | | 319-85-7 | **0.17 JN** | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | **0.075 JN** | 0.024 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED02(0.33-0.66) | GPECSED02(0.66-1.97) | GPECSED02(1.97-3.28) | GPECSED02(3.28-6.56) | GPECSED02(6.56-9.48) | GPECSED02(9.48-10.75) | GPECSED02(10.75-16.1 NSU) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 16.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| delta-BHC | | 319-86-8 | 0.093 UJ | **0.12 JN** | **0.27 JN** | **0.16 JN** | 0.049 UJ | **0.052 JN** | 0.024 UJ |
| alpha-chlordane | | 5103-71-9 | 0.093 UJ | **0.28 J** | **0.53 J** | **0.63 J** | 0.049 UJ | 0.04 U | 0.024 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.093 UJ | 0.081 UJ | **0.76 J** | **0.73 J** | 0.049 UJ | **0.05 JN** | 0.024 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.16 JN** | **0.15 JN** | **0.25 JN** | **0.35 JN** | **0.31 J** | **0.23** | 0.024 UJ |
| o,p'-DDE | | 3424-82-6 | 0.093 UJ | 0.081 UJ | **0.22 JN** | **0.15 JN** | 0.049 UJ | 0.04 U | 0.024 UJ |
| 4,4'-DDE | | 72-55-9 | **0.14 JN** | **0.15 JN** | **0.33 JN** | **0.63 JN** | 0.049 UJ | 0.04 U | 0.024 UJ |
| o,p'-DDT | | 789-02-6 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| 4,4'-DDT | | 50-29-3 | **0.34 J** | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| Dieldrin | | 60-57-1 | 0.093 UJ | 0.081 UJ | 0.061 UJ | **0.57 J** | 0.049 UJ | 0.04 U | 0.024 UJ |
| Endosulfan I | | 959-98-8 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| Endosulfan II | | 33213-65-9 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.093 UJ | 0.081 UJ | **0.097 JN** | **0.12 JN** | **0.21 JN** | **0.12 JN** | 0.024 UJ |
| Endrin | | 72-20-8 | 0.093 UJ | **0.24 J** | **0.34 J** | **0.41 J** | 0.049 UJ | 0.04 U | 0.024 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | **0.044 J** | 0.024 UJ |
| Endrin ketone | | 53494-70-5 | 0.093 UJ | 0.081 UJ | **0.1 JN** | **0.069 JN** | 0.049 UJ | 0.04 U | 0.024 UJ |
| Heptachlor | | 76-44-8 | 0.093 UJ | **0.083 JN** | **0.29 JN** | **0.19 JN** | 0.049 UJ | 0.04 U | 0.024 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.093 UJ | **0.094 JN** | **0.21 JN** | **0.098 JN** | 0.049 UJ | 0.04 U | 0.024 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 UJ | 0.024 UJ |
| Methoxychlor | | 72-43-5 | 0.19 UJ | 0.16 UJ | 0.12 UJ | 0.14 UJ | **0.15 JN** | **0.081 JN** | 0.049 UJ |
| Mirex | | 2385-85-5 | 0.093 UJ | 0.081 UJ | **0.065 J** | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| Mitotane | | 53-19-0 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 U | 0.024 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.093 UJ | 0.081 UJ | 0.061 UJ | 0.069 UJ | 0.049 UJ | 0.04 UJ | 0.024 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.7 UJ | 3.2 UJ | 2.5 UJ | 2.8 UJ | 1.9 UJ | 1.6 UJ | 0.98 UJ |
| Toxaphene | | 8001-35-2 | 3.7 UJ | 3.2 UJ | 2.5 UJ | 2.8 UJ | 1.9 UJ | 1.6 U | 0.98 UJ |
| Total Pesticides | | TPEST | **0.81** | **1.227** | **3.782** | **4.337** | **0.67** | **0.652** | ND |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | **0.000047 J** |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | **0.000055 J** |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | **0.003 J** |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | **0.004 J** |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | **0.0064 J** |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | **0.00053 J** |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | **0.0079 J** |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | **0.00092 J** |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | **0.0036 J** |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | **0.00048 J** |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | **0.00082 J** |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | **0.000069 J** |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | **0.000057 J** |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | **0.0016 J** |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | **0.018 J** |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | 0.00096 UJ |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | **0.0031 J** |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | **0.00059 J** |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | **0.00081 J** |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | 0.24 UJ |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | **0.051978** |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 37 UJ | 34 UJ | 26 UJ | 28 UJ | 20 UJ | 16 U | 9.8 U |
| 2,4-D | | 94-75-7 | 0.37 UJ | 0.34 UJ | 0.26 UJ | 0.28 UJ | 0.2 UJ | 0.16 U | 0.098 U |
| 2,4-DB | | 94-82-6 | 0.37 UJ | 0.34 UJ | 0.26 UJ | 0.28 UJ | 0.2 UJ | 0.16 U | 0.098 U |
| Dicamba | | 1918-00-9 | 0.18 UJ | 0.17 UJ | 0.13 UJ | 0.14 UJ | 0.099 UJ | 0.079 U | 0.049 U |
| Dichloroprop | | 120-36-5 | 0.37 UJ | 0.34 UJ | 0.26 UJ | 0.28 UJ | 0.2 UJ | 0.16 U | 0.098 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.41 UJ | 0.39 UJ | 0.29 UJ | 0.31 UJ | **0.66 JN** | 0.18 U | 0.11 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 | GPEC-SED02 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED02(0.33-0.66) | GPECSED02(0.66-1.97) | GPECSED02(1.97-3.28) | GPECSED02(3.28-6.56) | GPECSED02(6.56-9.48) | GPECSED02(9.48-10.75) | GPECSED02(10.75-16.1 NSU) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 16.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.055 UJ | 0.051 UJ | 0.039 UJ | 0.042 UJ | 0.03 UJ | 0.024 UJ | 0.015 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 37 UJ | 34 UJ | 26 UJ | 28 UJ | 20 UJ | 16 U | 9.8 U |
| Silvex | | 93-72-1 | 0.091 UJ | 0.086 UJ | 0.065 UJ | 0.069 UJ | 0.05 UJ | 0.04 U | 0.024 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.091 UJ | 0.086 UJ | 0.065 UJ | 0.069 UJ | 0.05 UJ | 0.04 U | 0.024 U |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | 0.00043 UJ | **0.027 J** | 0.00035 UJ | 0.00025 UJ | 0.0002 UJ | 0.00012 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **17200 J** | **16600 J** | **14800 J** | **13600 J** | **9240 J** | **11600** | **6090** |
| Antimony | | 7440-36-0 | **7.5 J** | **9.8 J** | **13.8 J** | **37 J** | **34.2 J** | **12 J** | **0.73 J** |
| Arsenic | | 7440-38-2 | **101 J** | **112 J** | **147 J** | **191 J** | **317 J** | **254 J** | **10.2 J** |
| Barium | | 7440-39-3 | **265 J** | **259 J** | **291 J** | **359 J** | **497 J** | **278 J** | **78.3 J** |
| Beryllium | | 7440-41-7 | **1.1 J** | **1.1 J** | **1 J** | **1.1 J** | **0.72 J** | **0.63** | **0.33** |
| Cadmium | | 7440-43-9 | **112 J** | **138 J** | **170 J** | **358 J** | **15.4 J** | **5.8 J** | **0.53 J** |
| Calcium | | 7440-70-2 | **15700 J** | **15000 J** | **15400 J** | **14100 J** | **6090 J** | **7560 J** | **10900 J** |
| Chromium | | 7440-47-3 | **947 J** | **1070 J** | **1570 J** | **2030 J** | **185 J** | **140** | **20.6** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **28.7 J** | **32.9 J** | **42.3 J** | **64 J** | **16 J** | **25** | **6.3** |
| Copper | | 7440-50-8 | **5730 J** | **7480 J** | **7890 J** | **8720 J** | **4600 J** | **1710 J** | **99.3 J** |
| Iron | | 7439-89-6 | **45900 J** | **40200 J** | **36700 J** | **38400 J** | **28000 J** | **25500** | **16600** |
| Lead | | 7439-92-1 | **1470 J** | **1560 J** | **1470 J** | **1600 J** | **965 J** | **629 J** | **285 J** |
| Magnesium | | 7439-95-4 | **12700 J** | **10800 J** | **8910 J** | **7550 J** | **4680 J** | **6620** | **6370** |
| Manganese | | 7439-96-5 | **291 J** | **275 J** | **245 J** | **244 J** | **152 J** | **236 J** | **303 J** |
| Mercury | | 7439-97-6 | **4.69 J** | **11.8 J** | **9.81 J** | **9.39 J** | **5.93 J** | **1.33** | **3.33** |
| Nickel | | 7440-02-0 | **887 J** | **1100 J** | **1750 J** | **3380 J** | **911 J** | **436** | **24** |
| Potassium | | 7440-09-7 | **3720 J** | **3270 J** | **2770 J** | **2640 J** | **1900 J** | **2340** | **1530** |
| Selenium | | 7782-49-2 | **11.7 J** | **12.8 J** | **12.4 J** | **11.6 J** | **50 J** | **59.2 J** | **1.8 J** |
| Silver | | 7440-22-4 | **32.7 J** | **38 J** | **51.3 J** | **54.2 J** | **15.2 J** | **7.5 J** | **0.33 J** |
| Sodium | | 7440-23-5 | **25200 J** | **21300 J** | **15500 J** | **16200 J** | **8270 J** | **4350 J** | **704 J** |
| Thallium | | 7440-28-0 | **0.86 J** | **0.82 J** | **0.68 J** | **0.64 J** | **2.9 J** | **1.3 J** | **0.18 J** |
| Tin | | 7440-31-5 | **109 J** | **114 J** | **117 J** | **150 J** | **122 J** | **44.2** | **34.4** |
| Vanadium | | 7440-62-2 | **171 J** | **157 J** | **92.5 J** | **116 J** | **35.2 J** | **36.6 J** | **21.9 J** |
| Zinc | | 7440-66-6 | **7340 J** | **8930 J** | **12600 J** | **21200 J** | **3110 J** | **1190 J** | **133 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **19.2 J** | **3.6 J** | **7.8 J** | **8.7 J** | **7.3 J** | **0.9 J** | 0.61 UJ |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **818 J** | **970 J** | **966 J** | **1470 J** | **749 J** | **529** | 30.6 U |
| Black Carbon | | BC | **7970 J** | **7760 J** | **6520 J** | **7380 J** | **84700 J** | **40400 J** | **11700 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.6 J** | **1.7 J** | **1.4 J** | **0.98 J** | 2.5 UJ | 2.0 U | 1.2 U |
| pH (s.u.) | | pH | **7.8 J** | **7.6 J** | **7.7 J** | **7.6 J** | **7.8 J** | **7.9 J** | **8.2 J** |
| Sulfide | | 18496-25-8 | **11800 J** | **11900 J** | **16600 J** | **20400 J** | **6660 J** | **4340** | **78.3 J** |
| Total Kjeldahl Nitrogen | | TKN | **5380 J** | **7700 J** | **8340 J** | **9760 J** | **6490 J** | **3940 J** | **1200 J** |
| Total Nitrogen | | 7727-37-9 | **5380 J** | **7700 J** | **8340 J** | **9760 J** | **6490 J** | **3940 J** | **1200 J** |
| Total Organic Carbon | | TOC | **99600 J** | **139000 J** | **145000 J** | **144000 J** | **308000 J** | **255000 J** | **35200 J** |
| Total Phosphorous | | 7723-14-0 | **302 J** | **318 J** | **101 J** | **613 J** | **64.2 J** | **822 J** | **389 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED03(0-0.33) | GPECSED03(0.33-0.66) | GPECSED03(0.66-1.97) | GPECSED03(1.97-3.28) | GPECSED03(3.28-6.56) | GPECSED03(6.56-9.84) | GPECSED03(9.84-10.5)NSU |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 10.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 1.7 UJ | NA | NA | NA | NA | **0.4 J** | **6.2 J** |
| Toluene | | 108-88-3 | 1.7 UJ | NA | NA | NA | NA | **1.5 J** | **32 J** |
| Ethylbenzene | | 100-41-4 | 1.7 UJ | NA | NA | NA | NA | **3.1 J** | **85 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | 5.2 UJ | NA | NA | NA | NA | **5.9 J** | **110 J** |
| Total BTEX | | TBTEX | ND | NA | NA | NA | NA | **10.9** | **233.2** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 6.9 UJ | NA | NA | NA | NA | 1.7 UJ | 2.7 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Bromodichloromethane | | 75-27-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Bromoform | | 75-25-2 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Bromomethane | | 74-83-9 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 2-Butanone | | 78-93-3 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Carbon disulfide | | 75-15-0 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | **0.2 J** |
| Carbon tetrachloride | | 56-23-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Chlorobenzene | | 108-90-7 | 1.7 UJ | NA | NA | NA | NA | **0.065 J** | **0.11 J** |
| Chloroethane | | 75-00-3 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Chloroform | | 67-66-3 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Chloromethane | | 74-87-3 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Cyclohexane | | 110-82-7 | 1.7 UJ | NA | NA | NA | NA | **0.16 J** | **0.62 J** |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Dibromochloromethane | | 124-48-1 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,2-Dibromoethane | | 106-93-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 1.7 UJ | NA | NA | NA | NA | **0.14 J** | 0.66 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 1.7 UJ | NA | NA | NA | NA | **0.075 J** | 0.66 UJ |
| Dichlorodifluoromethane | | 75-71-8 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Isopropyl benzene | | 98-82-8 | 1.7 UJ | NA | NA | NA | NA | **0.45 J** | **9.2 J** |
| Methyl acetate | | 79-20-9 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 U | 0.66 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Methylcyclohexane | | 108-87-2 | 1.7 UJ | NA | NA | NA | NA | **0.57 J** | **3.7 J** |
| Methylene chloride | | 75-09-2 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Styrene | | 100-42-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Tetrachloroethene | | 127-18-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | **0.59 J** | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Trichloroethene | | 79-01-6 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Trichlorofluoromethane | | 75-69-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED03(0-0.33) | GPECSED03(0.33-0.66) | GPECSED03(0.66-1.97) | GPECSED03(1.97-3.28) | GPECSED03(3.28-6.56) | GPECSED03(6.56-9.84) | GPECSED03(9.84-10.5)NSU |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 10.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Vinyl chloride | | 75-01-4 | 1.7 UJ | NA | NA | NA | NA | 0.43 UJ | 0.66 UJ |
| Total VOCs | | TVOC | **0.59** | NA | NA | NA | NA | **12.36** | **247.03** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **11 J** | **39 J** | **47 J** | **71 J** | **73 J** | **1100** | **250 J** |
| Acenaphthylene | | 208-96-8 | **3.4 J** | **21 J** | **42 J** | **26 J** | **32 J** | **160** | **130 J** |
| Anthracene | | 120-12-7 | **8.6 J** | **45 J** | **55 J** | **65 J** | **67 J** | **600** | **210 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.6 J** | **30 J** | **39 J** | **17 J** | **28 J** | **170** | **93 J** |
| Fluoranthene | | 206-44-0 | **18 J** | **83 J** | **100 J** | **130 J** | **110 J** | **680** | **300 J** |
| Fluorene | | 86-73-7 | **5.9 J** | **33 J** | **42 J** | **63 J** | **59 J** | **650** | **220 J** |
| 2-Methylnaphthalene | | 91-57-6 | 11 UJ | **54 J** | **76 J** | **150 J** | **170 J** | **2800** | **640 J** |
| Naphthalene | | 91-20-3 | 11 UJ | **80 J** | **110 J** | **220 J** | **290 J** | **7700** | **1000 J** |
| Phenanthrene | | 85-01-8 | **12 J** | **140 J** | **170 J** | **250 J** | **240 J** | **2100** | **790 J** |
| Pyrene | | 129-00-0 | **26 J** | **130 J** | **160 J** | **180 J** | **160 J** | **1200** | **510 J** |
| Benz[a]anthracene | | 56-55-3 | **12 J** | **53 J** | **81 J** | **69 J** | **68 J** | **440** | **210 J** |
| Benzo[a]pyrene | | 50-32-8 | **7 J** | **42 J** | **73 J** | **48 J** | **45 J** | **370** | **170 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **9.1 J** | **41 J** | **67 J** | **54 J** | **46 J** | **300** | **150 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |
| Chrysene | | 218-01-9 | **13 J** | **63 J** | **96 J** | **79 J** | **72 J** | **450** | **230 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 11 UJ | **2.8 J** | **4.4 J** | 21 UJ | **4.6 J** | **30** | **10 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.4 J** | **13 J** | **24 J** | **18 J** | **20 J** | **110** | **58 J** |
| Total PAHs | | TPAH | **135** | **869.8** | **1186.4** | **1440** | **1484.6** | **18860** | **4971** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 55 U | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 55 UJ | 100 UJ | **10 J** | **20 J** | **22 J** | **230** | **63 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 U | 26 U | 21 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **180 J** | **1100 J** | **3700 J** | **4500** | **1100 J** | **22 J** | **380 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Caprolactam | | 105-60-2 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 660 U | 520 UJ |
| Carbazole | | 86-74-8 | 11 U | 21 UJ | 21 UJ | 21 UJ | 18 UJ | **20 J** | 21 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 4-Chloroaniline | | 106-47-8 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |
| 2-Chlorophenol | | 95-57-8 | 55 U | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Dibenzofuran | | 132-64-9 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | **110 J** | 100 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 130 U | 21 UJ |
| Diethyl phthalate | | 84-66-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Dimethyl phthalate | | 131-11-3 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 U |
| 2,4-Dimethylphenol | | 105-67-9 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 3300 U | 520 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 3300 U | 520 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 1,4-Dioxane | | 123-91-1 | 110 UJ | 210 UJ | 210 UJ | 210 UJ | 180 UJ | 260 U | 200 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 55 UJ | **12 J** | 100 UJ | **46 J** | **27 J** | 130 U | 100 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |
| Hexachlorobutadiene | | 87-68-3 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED03(0-0.33) | GPECSED03(0.33-0.66) | GPECSED03(0.66-1.97) | GPECSED03(1.97-3.28) | GPECSED03(3.28-6.56) | GPECSED03(6.56-9.84) | GPECSED03(9.84-10.5)NSU |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 10.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 UJ | 100 UJ |
| Hexachloroethane | | 67-72-1 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Isophorone | | 78-59-1 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 2-Methylphenol | | 95-48-7 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 2-Nitroaniline | | 88-74-4 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 660 U | 520 UJ |
| 3-Nitroaniline | | 99-09-2 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 660 U | 520 UJ |
| 4-Nitroaniline | | 100-01-6 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 660 U | 520 UJ |
| Nitrobenzene | | 98-95-3 | 110 UJ | 210 UJ | 210 UJ | 210 UJ | 180 UJ | 260 U | 200 UJ |
| 2-Nitrophenol | | 88-75-5 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 4-Nitrophenol | | 100-02-7 | 280 UJ | 530 UJ | 530 UJ | 540 UJ | 450 UJ | 3300 U | 520 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 26 U | 21 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| Pentachlorophenol | | 87-86-5 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| Phenol | | 108-95-2 | 11 UJ | 21 UJ | 21 UJ | 21 UJ | 18 UJ | 130 U | 21 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 130 U | 100 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 55 UJ | 100 UJ | 100 UJ | 110 UJ | 87 UJ | 640 U | 100 UJ |
| Total SVOCs | | TSVOC | **315** | **1981.8** | **4896.4** | **6006** | **2633.6** | **19242** | **5414** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1221 | | 11104-28-2 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1232 | | 11141-16-5 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1242 | | 53469-21-9 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1248 | | 12672-29-6 | **4.4 J** | **25 J** | **38 J** | **57 J** | **53 J** | **11 J** | **31** |
| Aroclor 1254 | | 11097-69-1 | **4.3 J** | **25 J** | **45 J** | **52 J** | **50 J** | **4.3 J** | **42** |
| Aroclor 1260 | | 11096-82-5 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1262 | | 37324-23-5 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Aroclor 1268 | | 11100-14-4 | 2.8 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1 UJ | 0.69 U | 1.1 U |
| Total PCBs | | 1336-36-3 | **8.7** | **50** | **83** | **109** | **103** | **15.3** | **73** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| alpha-bhc | | 319-84-6 | **0.063 J** | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| beta-BHC | | 319-85-7 | 0.14 UJ | **0.091 J** | **0.26 J** | 0.065 UJ | **0.12 JN** | 0.17 U | 0.27 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED03(0-0.33) | GPECSED03(0.33-0.66) | GPECSED03(0.66-1.97) | GPECSED03(1.97-3.28) | GPECSED03(3.28-6.56) | GPECSED03(6.56-9.84) | GPECSED03(9.84-10.5)NSU |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 10.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| delta-BHC | | 319-86-8 | 0.14 UJ | **0.085 JN** | **0.12 JN** | **0.24 JN** | **0.17 JN** | **0.072 J** | **0.8 J** |
| alpha-chlordane | | 5103-71-9 | 0.14 UJ | 0.066 UJ | **0.44 J** | **0.76 J** | **0.52 J** | 0.17 U | **0.46 JN** |
| gamma-Chlordane | | 5103-74-2 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | **0.59 JN** |
| oxy-Chlordane | | 27304-13-8 | 0.14 UJ | **0.012 J** | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.14 UJ | **0.4 JN** | **0.68 JN** | **0.84 J** | **0.51 J** | **0.44** | **5.3 J** |
| o,p'-DDE | | 3424-82-6 | 0.14 UJ | **0.088 JN** | **0.13 JN** | **0.16 JN** | **0.12 JN** | 0.17 U | **0.55 JN** |
| 4,4'-DDE | | 72-55-9 | 0.14 UJ | **0.1 JN** | **0.17 JN** | **0.17 JN** | **0.2 JN** | 0.17 U | **0.91 JN** |
| o,p'-DDT | | 789-02-6 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| 4,4'-DDT | | 50-29-3 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Dieldrin | | 60-57-1 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Endosulfan I | | 959-98-8 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Endosulfan II | | 33213-65-9 | 0.14 UJ | 0.066 UJ | **0.16 JN** | **0.021 J** | 0.051 UJ | 0.17 U | 0.27 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.14 UJ | **0.1 JN** | **0.74 J** | **0.16 J** | **0.074 JN** | 0.17 U | 0.27 UJ |
| Endrin | | 72-20-8 | 0.14 UJ | 0.066 UJ | **0.57 JN** | **0.69 J** | **0.48 J** | 0.17 U | **0.77 J** |
| Endrin aldehyde | | 7421-93-4 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Endrin ketone | | 53494-70-5 | **0.072 J** | **0.23 JN** | **0.34 JN** | **0.17 JN** | **0.19 JN** | 0.17 U | **0.29 JN** |
| Heptachlor | | 76-44-8 | 0.14 UJ | **0.099 JN** | **0.21 JN** | **0.4 JN** | **0.25 JN** | 0.17 U | **0.71 J** |
| Heptachlor epoxide | | 1024-57-3 | 0.14 UJ | 0.066 UJ | 0.07 UJ | **0.87 J** | **0.1 JN** | 0.17 U | 0.27 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| Methoxychlor | | 72-43-5 | 0.28 UJ | **0.45 JN** | **1.3 JN** | **1.3 J** | **0.58 JN** | 0.34 U | **3.9 J** |
| Mirex | | 2385-85-5 | 0.14 UJ | 0.066 UJ | 0.07 UJ | **0.12 J** | **0.07 JN** | 0.17 U | 0.27 UJ |
| Mitotane | | 53-19-0 | **0.15 J** | **0.72 J** | **1.3 J** | **1.4 J** | **0.94 J** | 0.17 U | **2 JN** |
| cis-Nonachlor | | 5103-73-1 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.051 UJ | 0.17 U | 0.27 UJ |
| trans-Nonachlor | | 39765-80-5 | 5.5 UJ | 2.6 UJ | 2.8 UJ | 2.6 UJ | 2 UJ | 6.9 U | 11 UJ |
| Toxaphene | | 8001-35-2 | 5.5 UJ | 2.6 UJ | 2.8 UJ | 2.6 UJ | 2 UJ | 6.9 U | 11 UJ |
| Total Pesticides | | TPEST | **0.285** | **2.375** | **6.42** | **7.301** | **4.324** | **0.512** | **16.28** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 55 UJ | 26 UJ | 28 UJ | 26 UJ | 22 UJ | 14 U | 21 UJ |
| 2,4-D | | 94-75-7 | 0.55 UJ | 0.26 UJ | 0.28 UJ | 0.26 UJ | 0.22 UJ | 0.14 U | 0.21 UJ |
| 2,4-DB | | 94-82-6 | 0.55 UJ | 0.26 UJ | 0.28 UJ | 0.26 UJ | 0.22 UJ | 0.14 U | 0.21 UJ |
| Dicamba | | 1918-00-9 | 0.28 UJ | 0.13 UJ | 0.14 UJ | 0.13 UJ | 0.11 UJ | 0.069 U | 0.11 UJ |
| Dichloroprop | | 120-36-5 | 0.55 UJ | 0.26 UJ | 0.28 UJ | 0.26 UJ | 0.22 UJ | 0.14 U | 0.21 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.62 UJ | 0.3 UJ | 0.31 UJ | 0.29 UJ | 0.25 UJ | 0.15 U | 0.24 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 | GPEC-SED03 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED03(0-0.33) | GPECSED03(0.33-0.66) | GPECSED03(0.66-1.97) | GPECSED03(1.97-3.28) | GPECSED03(3.28-6.56) | GPECSED03(6.56-9.84) | GPECSED03(9.84-10.5)NSU |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 10.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.083 UJ | 0.04 UJ | 0.042 UJ | 0.039 UJ | 0.033 UJ | 0.021 U | 0.032 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 55 UJ | 26 UJ | 28 UJ | 26 UJ | 22 UJ | 14 U | 21 UJ |
| Silvex | | 93-72-1 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.055 UJ | 0.034 U | 0.053 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.14 UJ | 0.066 UJ | 0.07 UJ | 0.065 UJ | 0.055 UJ | 0.034 U | 0.053 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00069 UJ | 0.00033 UJ | R | 0.00033 UJ | 0.00028 UJ | 0.00017 UJ | **0.0016 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **6430 J** | **7460 J** | **8220 J** | **8870 J** | **10800 J** | **4680** | **8150 J** |
| Antimony | | 7440-36-0 | **3.1 J** | **3.5 J** | **4.9 J** | **4.9 J** | **9.9 J** | **7.9 J** | **21.0 J** |
| Arsenic | | 7440-38-2 | **9.6 J** | **26.3 J** | **33.4 J** | **36.0 J** | **78.2 J** | **76.6** | **96.7 J** |
| Barium | | 7440-39-3 | **103 J** | **185 J** | **197 J** | **158 J** | **219 J** | **164 J** | **252 J** |
| Beryllium | | 7440-41-7 | **0.29 J** | **0.39 J** | **0.42 J** | **0.52 J** | **0.70 J** | **0.42** | **2.7 J** |
| Cadmium | | 7440-43-9 | **6.4 J** | **21.6 J** | **42.7 J** | **44.8 J** | **93.9 J** | **5.9 J** | **146 J** |
| Calcium | | 7440-70-2 | **11300 J** | **11500 J** | **10700 J** | **8980 J** | **12000 J** | **4250 J** | **11200 J** |
| Chromium | | 7440-47-3 | **81.4 J** | **188 J** | **251 J** | **310 J** | **886 J** | **68.8 J** | **719 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **6.3 J** | **9.0 J** | **10.7 J** | **10.8 J** | **24.2 J** | **7.5 J** | **33.0 J** |
| Copper | | 7440-50-8 | **510 J** | **1470 J** | **1680 J** | **2870 J** | **7290 J** | **3510** | **13800 J** |
| Iron | | 7439-89-6 | **24000 J** | **22500 J** | **24500 J** | **23500 J** | **25500 J** | **13800 J** | **30100 J** |
| Lead | | 7439-92-1 | **268 J** | **732 J** | **973 J** | **1760 J** | **1540 J** | **576 J** | **1870 J** |
| Magnesium | | 7439-95-4 | **10700 J** | **7820 J** | **7480 J** | **6440 J** | **6840 J** | **2080** | **5020 J** |
| Manganese | | 7439-96-5 | **120 J** | **125 J** | **136 J** | **122 J** | **154 J** | **152 J** | **136 J** |
| Mercury | | 7439-97-6 | **0.812 J** | **1.34 J** | **1.46 J** | **2.4 J** | **2.64 J** | **1.92** | **1.69 J** |
| Nickel | | 7440-02-0 | **67.4 J** | **157 J** | **213 J** | **260 J** | **839 J** | **346 J** | **4010 J** |
| Potassium | | 7440-09-7 | **2740 J** | **1740 J** | **1810 J** | **1760 J** | **1870 J** | **752 J** | **1570 J** |
| Selenium | | 7782-49-2 | 1.7 UJ | **3.1 J** | **3.7 J** | **5.9 J** | **7.5 J** | **6.4** | **8.9 J** |
| Silver | | 7440-22-4 | **2.9 J** | **7.5 J** | **9.4 J** | **12.5 J** | **24.2 J** | **4.1 J** | **20.6 J** |
| Sodium | | 7440-23-5 | **37800 J** | **15500 J** | **15600 J** | **14600 J** | **11800 J** | **2570 J** | **10200 J** |
| Thallium | | 7440-28-0 | **0.17 J** | **0.25 J** | **0.28 J** | **0.32 J** | **0.44 J** | **0.99** | **0.46 J** |
| Tin | | 7440-31-5 | **21.1 J** | **41.6 J** | **48.4 J** | **53.7 J** | **81.5 J** | **50.3 J** | **229 J** |
| Vanadium | | 7440-62-2 | **32.0 J** | **40.5 J** | **47.9 J** | **67.7 J** | **81.0 J** | **20.1 J** | **77.3 J** |
| Zinc | | 7440-66-6 | **607 J** | **1520 J** | **1920 J** | **2100 J** | **8350 J** | **1210** | **10100 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 3.4 UJ | **2.2 J** | **1.2 J** | **1.2 J** | **3.3 J** | **8.3** | **3.6 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **196 J** | **412 J** | **583 J** | **930 J** | **1640 J** | **472 J** | **3680 J** |
| Black Carbon | | BC | **9860 J** | **20800 J** | **22600 J** | **12400 J** | **23900 J** | **27100 J** | **82500 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **3.6 J** | **1.5 J** | **1.5 J** | **1.7 J** | **1.4 J** | **1.5 J** | **1.2 J** |
| pH (s.u.) | | pH | **7.4 J** | **7.3 J** | **7.6 J** | **7.7 J** | **7.7 J** | **7.9 J** | **7.9 J** |
| Sulfide | | 18496-25-8 | **9560 J** | **3950 J** | **7770 J** | **10800 J** | **14000 J** | **1890** | **15600 J** |
| Total Kjeldahl Nitrogen | | TKN | 1030 UJ | **7370 J** | 522 UJ | **8290 J** | **7890 J** | **5050 J** | **10400 J** |
| Total Nitrogen | | 7727-37-9 | 50.0 UJ | **7370 J** | 50.0 UJ | **8290 J** | **7890 J** | **5050 J** | **10400 J** |
| Total Organic Carbon | | TOC | **179000 J** | **206000 J** | **211000 J** | **240000 J** | **189000 J** | **348000 J** | **195000 J** |
| Total Phosphorous | | 7723-14-0 | **541 J** | **286 J** | **819 J** | **1450 J** | **272 J** | **860** | **1220 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED04(0-0.33) | GPECSED04(0.33-0.66) | GPECSED04(0.66-1.97) | GPECSED04(1.97-3.28) | GPECSED04(3.28-6.56) | GPECSED04(6.56-8.25) | GPECSED04(8.25-15.2) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 | 15.2 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.62 J** | NA | NA | **1.2 J** | NA | 0.44 U | 0.35 U |
| Toluene | | 108-88-3 | **1.4 J** | NA | NA | **2 J** | NA | 0.44 U | 0.35 U |
| Ethylbenzene | | 100-41-4 | **1.9 J** | NA | NA | **3.2 J** | NA | **0.27 J** | **0.053 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **3 J** | NA | NA | **5.2 J** | NA | **0.9 J** | **0.24 J** |
| Total BTEX | | TBTEX | **6.92** | NA | NA | **11.6** | NA | **1.17** | **0.293** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 4.9 UJ | NA | NA | 3.3 UJ | NA | 1.8 UJ | 1.4 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Bromodichloromethane | | 75-27-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Bromoform | | 75-25-2 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Bromomethane | | 74-83-9 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 2-Butanone | | 78-93-3 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Carbon disulfide | | 75-15-0 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Carbon tetrachloride | | 56-23-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Chlorobenzene | | 108-90-7 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Chloroethane | | 75-00-3 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Chloroform | | 67-66-3 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Chloromethane | | 74-87-3 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Cyclohexane | | 110-82-7 | 1.2 UJ | NA | NA | 0.83 UJ | NA | **0.13 J** | **0.059 J** |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Dibromochloromethane | | 124-48-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,2-Dibromoethane | | 106-93-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Dichlorodifluoromethane | | 75-71-8 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,1-Dichloroethene | | 75-35-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,2-Dichloropropane | | 78-87-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Isopropyl benzene | | 98-82-8 | **0.21 J** | NA | NA | **0.38 J** | NA | **0.07 J** | 0.35 U |
| Methyl acetate | | 79-20-9 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Methyl tert-butyl ether | | 1634-04-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Methylcyclohexane | | 108-87-2 | 1.2 UJ | NA | NA | **0.19 J** | NA | **0.64** | **0.27 J** |
| Methylene chloride | | 75-09-2 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Styrene | | 100-42-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| Tetrachloroethene | | 127-18-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 UJ | 0.35 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,1,1-Trichloroethane | | 71-55-6 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Trichloroethene | | 79-01-6 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Trichlorofluoromethane | | 75-69-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED04(0-0.33) | GPECSED04(0.33-0.66) | GPECSED04(0.66-1.97) | GPECSED04(1.97-3.28) | GPECSED04(3.28-6.56) | GPECSED04(6.56-8.25) | GPECSED04(8.25-15.2) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 | 15.2 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Vinyl chloride | | 75-01-4 | 1.2 UJ | NA | NA | 0.83 UJ | NA | 0.44 U | 0.35 U |
| Total VOCs | | TVOC | **7.13** | NA | NA | **12.17** | NA | **2.01** | **0.622** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **4.4 J** | **2.5 J** | **4.4 J** | **10 J** | **200 J** | **20** | **0.99 J** |
| Acenaphthylene | | 208-96-8 | **2.2 J** | **2.2 J** | **3 J** | **4.3 J** | **36 J** | **4.4** | **0.42 J** |
| Anthracene | | 120-12-7 | **3.8 J** | **3.4 J** | **5.5 J** | **13 J** | **140 J** | **21** | **0.92 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **6.6 J** | **4.7 J** | **8.4 J** | **8 J** | **41 J** | **6.4** | **0.81 J** |
| Fluoranthene | | 206-44-0 | **11 J** | **11 J** | **17 J** | **23 J** | **150 J** | **29** | **2.1 J** |
| Fluorene | | 86-73-7 | **2.4 J** | 7.1 UJ | 7 UJ | **8.8 J** | **120 J** | **15** | **0.67 J** |
| 2-Methylnaphthalene | | 91-57-6 | **8.1 J** | **1.8 J** | **2.7 J** | **12 J** | **680 J** | **43** | **1.6 J** |
| Naphthalene | | 91-20-3 | **11 J** | **4.7 J** | **7.5 J** | **28 J** | **2600 J** | **70** | **6.5** |
| Phenanthrene | | 85-01-8 | 7.9 UJ | 7.1 UJ | 7 UJ | **38 J** | **530 J** | **70** | 2.2 U |
| Pyrene | | 129-00-0 | **24 J** | **25 J** | **40 J** | **51 J** | **350 J** | **45** | **3.3** |
| Benz[a]anthracene | | 56-55-3 | **8 J** | **10 J** | **16 J** | **19 J** | **110 J** | **21** | **1.6 J** |
| Benzo[a]pyrene | | 50-32-8 | **7 J** | **8.3 J** | **11 J** | **14 J** | **85 J** | **12** | **1.2 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **9.2 J** | **9.8 J** | **13 J** | **14 J** | **74 J** | **12** | **1.5 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Chrysene | | 218-01-9 | **6.3 J** | **9.3 J** | **16 J** | **19 J** | **100 J** | **21** | **1.4 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | **1.3 J** | 7.1 UJ | 7 UJ | 5.3 UJ | **7.5 J** | **1.9 J** | 2.2 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.9 J** | **3.4 J** | **6.6 J** | **3.5 J** | **29 J** | **3.9** | **0.51 J** |
| Total PAHs | | TPAH | **109.2** | **96.1** | **151.1** | **265.6** | **5252.5** | **395.6** | **23.52** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 39 UJ | 35 UJ | 35 UJ | **2.7 J** | **55 J** | **4.4 J** | 11 U |
| Bis(chloroisopropyl)ether | | 108-60-1 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **81 J** | **140 J** | **330 J** | **300 J** | **27 J** | **2.2 J** | **10 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Butyl benzyl phthalate | | 85-68-7 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Caprolactam | | 105-60-2 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| Carbazole | | 86-74-8 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | **0.81 J** | 2.2 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 4-Chloroaniline | | 106-47-8 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2-Chloronaphthalene | | 91-58-7 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| 2-Chlorophenol | | 95-57-8 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Dibenzofuran | | 132-64-9 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | **3.5 J** | 11 U |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2,4-Dichlorophenol | | 120-83-2 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Diethyl phthalate | | 84-66-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Dimethyl phthalate | | 131-11-3 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2,4-Dimethylphenol | | 105-67-9 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Di-n-butyl phthalate | | 84-74-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| 2,4-Dinitrophenol | | 51-28-5 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 1,4-Dioxane | | 123-91-1 | 79 UJ | 71 UJ | 70 UJ | 53 UJ | 90 UJ | 26 UJ | 22 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Hexachlorobutadiene | | 87-68-3 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED04(0-0.33) | GPECSED04(0.33-0.66) | GPECSED04(0.66-1.97) | GPECSED04(1.97-3.28) | GPECSED04(3.28-6.56) | GPECSED04(6.56-8.25) | GPECSED04(8.25-15.2) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 | 15.2 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 UJ | 11 UJ |
| Hexachloroethane | | 67-72-1 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Isophorone | | 78-59-1 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2-Methylphenol | | 95-48-7 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2-Nitroaniline | | 88-74-4 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| 3-Nitroaniline | | 99-09-2 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| 4-Nitroaniline | | 100-01-6 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| Nitrobenzene | | 98-95-3 | 79 UJ | 71 UJ | 70 UJ | 53 UJ | 90 UJ | 26 U | 22 U |
| 2-Nitrophenol | | 88-75-5 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 4-Nitrophenol | | 100-02-7 | 200 UJ | 180 UJ | 180 UJ | 140 UJ | 230 UJ | 67 U | 57 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Pentachlorophenol | | 87-86-5 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Phenol | | 108-95-2 | 7.9 UJ | 7.1 UJ | 7 UJ | 5.3 UJ | 9.1 UJ | 2.6 U | 2.2 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 39 UJ | 35 UJ | 35 UJ | 26 UJ | 45 UJ | 13 U | 11 U |
| Total SVOCs | | TSVOC | **190.2** | **236.1** | **481.1** | **568.3** | **5334.5** | **406.51** | **33.52** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1221 | | 11104-28-2 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1232 | | 11141-16-5 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1242 | | 53469-21-9 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1248 | | 12672-29-6 | **2.4 J** | **2.6 J** | **4.5 J** | **8.3 J** | **1.4 J** | 0.34 U | 0.26 U |
| Aroclor 1254 | | 11097-69-1 | **3.4 J** | **3.6 J** | **6.1 J** | **9.6 J** | **3.1 J** | 0.34 U | 0.26 U |
| Aroclor 1260 | | 11096-82-5 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1262 | | 37324-23-5 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Aroclor 1268 | | 11100-14-4 | 0.93 UJ | 0.91 UJ | 0.89 UJ | 0.65 UJ | 0.58 UJ | 0.34 U | 0.26 U |
| Total PCBs | | 1336-36-3 | **5.8** | **6.2** | **10.6** | **17.9** | **4.5** | ND | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **7500 J** | NA | NA | NA | NA | NA | **10** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **3600 J** | NA | NA | NA | NA | NA | **9.7 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **5800 J** | NA | NA | NA | NA | NA | **6.1 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **150 J** | NA | NA | NA | NA | NA | **0.60 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **7200 J** | NA | NA | NA | NA | NA | **14** |
| Total HxCDF | | 55684-94-1 | **3600 J** | NA | NA | NA | NA | NA | **6** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **450 J** | NA | NA | NA | NA | NA | **0.77 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | 240 UJ | NA | NA | NA | NA | NA | 39 U |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **1300 J** | NA | NA | NA | NA | NA | **2.6** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **740 J** | NA | NA | NA | NA | NA | **1.4 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **65 J** | NA | NA | NA | NA | NA | 39 U |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **160 J** | NA | NA | NA | NA | NA | 39 U |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **110 J** | NA | NA | NA | NA | NA | 39 U |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **140 J** | NA | NA | NA | NA | NA | **0.37 J** |
| Octachlorodibenzofuran | | 39001-02-0 | **4400 J** | NA | NA | NA | NA | NA | **4.1 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **39000 J** | NA | NA | NA | NA | NA | **45 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **2200 J** | NA | NA | NA | NA | NA | **3.3** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **130 J** | NA | NA | NA | NA | NA | 39 U |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **480 J** | NA | NA | NA | NA | NA | 39 U |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **67 J** | NA | NA | NA | NA | NA | 39 U |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **230 J** | NA | NA | NA | NA | NA | **0.58 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **1600 J** | NA | NA | NA | NA | NA | **1.6** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **240 J** | NA | NA | NA | NA | NA | 7.9 U |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **110 J** | NA | NA | NA | NA | NA | **1.1 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | 47 UJ | NA | NA | NA | NA | NA | 7.9 U |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.23 J** | 0.058 UJ | 0.034 U | 0.026 UJ |
| alpha-bhc | | 319-84-6 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| beta-BHC | | 319-85-7 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | **0.16 J** | 0.034 U | 0.026 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED04(0-0.33) | GPECSED04(0.33-0.66) | GPECSED04(0.66-1.97) | GPECSED04(1.97-3.28) | GPECSED04(3.28-6.56) | GPECSED04(6.56-8.25) | GPECSED04(8.25-15.2) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 | 15.2 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| delta-BHC | | 319-86-8 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | **0.019 J** |
| alpha-chlordane | | 5103-71-9 | 0.093 UJ | 0.091 UJ | **0.19 J** | **0.41 J** | **0.14 J** | 0.034 U | 0.026 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.22 J** | **0.21 J** | **0.29 J** | 0.065 UJ | **0.22 J** | 0.034 U | 0.026 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | **0.071 JN** | 0.034 UJ | 0.026 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.093 UJ | 0.091 UJ | **0.14 JN** | **0.22 JN** | **0.1 JN** | 0.034 U | 0.026 UJ |
| o,p'-DDE | | 3424-82-6 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.1 JN** | 0.058 UJ | 0.034 U | 0.026 UJ |
| 4,4'-DDE | | 72-55-9 | 0.093 UJ | **0.1 JN** | **0.14 JN** | **0.21 JN** | **0.2 JN** | 0.034 U | 0.026 UJ |
| o,p'-DDT | | 789-02-6 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| 4,4'-DDT | | 50-29-3 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| Dieldrin | | 60-57-1 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.15 JN** | 0.058 UJ | 0.034 U | 0.026 UJ |
| Endosulfan I | | 959-98-8 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| Endosulfan II | | 33213-65-9 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | **0.07 JN** | 0.034 U | 0.026 UJ |
| Endrin | | 72-20-8 | **0.09 J** | **0.1 J** | **0.19 J** | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| Endrin ketone | | 53494-70-5 | 0.093 UJ | **0.077 J** | 0.089 UJ | **0.069 JN** | **0.12 JN** | 0.034 U | 0.026 UJ |
| Heptachlor | | 76-44-8 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.16 JN** | **0.075 J** | 0.034 U | 0.026 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.11 JN** | 0.058 UJ | 0.034 U | 0.026 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 UJ | 0.026 UJ |
| Methoxychlor | | 72-43-5 | 0.19 UJ | 0.18 UJ | 0.18 UJ | 0.13 UJ | 0.12 UJ | 0.068 U | 0.052 UJ |
| Mirex | | 2385-85-5 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 UJ | 0.026 UJ |
| Mitotane | | 53-19-0 | 0.093 UJ | 0.091 UJ | 0.089 UJ | 0.065 UJ | 0.058 UJ | 0.034 U | 0.026 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.093 UJ | 0.091 UJ | 0.089 UJ | **0.078 JN** | 0.058 UJ | 0.034 U | 0.026 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.7 UJ | 3.6 UJ | 3.6 UJ | 2.6 UJ | 2.3 UJ | 1.4 UJ | 1 UJ |
| Toxaphene | | 8001-35-2 | 3.7 UJ | 3.6 UJ | 3.6 UJ | 2.6 UJ | 2.3 UJ | 1.4 U | 1 UJ |
| Total Pesticides | | TPEST | **0.31** | **0.487** | **0.95** | **1.737** | **1.156** | ND | **0.019** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | **0.00044 J** | 0.0004 U |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | **0.00025 J** | 0.0004 U |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | **0.0014 J** | **0.000075 J** |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.0094** | **0.0012** |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.013** | **0.0018** |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.0028 U | 0.0004 U |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.011** | **0.0016** |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.0016 J** | **0.00023 J** |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.027** | **0.0031** |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | 0.0028 U | 0.0004 U |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | **0.006 J** | **0.00012 J** |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | **0.00063 J** | 0.0004 U |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.013** | **0.0013** |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | **0.0036** | **0.0003 J** |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.005** | **0.00034 J** |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | **0.0052** | **0.00019 J** |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | **0.0025 J** | 0.0004 U |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | **0.0076** | **0.0001 J** |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | **0.006** | **0.0001 J** |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | **0.00051 J** | **0.000046 J** |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | **0.00041 J** | **0.00006 J** |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | **0.0013 J** | **0.000018 J** |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.0042** | **0.00051** |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | **0.12 J** | **0.00042 J** |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | 0.0028 U | 0.0004 U |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.0064** | **0.00094** |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | **0.0021 J** | **0.00022 J** |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.0025 J** | **0.00033 J** |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.14 U | 0.1 U |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.25104** | **0.012999** |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 39 UJ | 36 UJ | 36 UJ | 27 UJ | 24 UJ | 14 U | 11 U |
| 2,4-D | | 94-75-7 | 0.39 UJ | 0.36 UJ | 0.36 UJ | 0.27 UJ | 0.24 UJ | 0.14 U | 0.11 U |
| 2,4-DB | | 94-82-6 | 0.39 UJ | 0.36 UJ | 0.36 UJ | 0.27 UJ | 0.24 UJ | 0.14 U | 0.11 U |
| Dicamba | | 1918-00-9 | 0.2 UJ | 0.18 UJ | 0.18 UJ | 0.13 UJ | 0.12 UJ | 0.071 U | 0.056 U |
| Dichloroprop | | 120-36-5 | 0.39 UJ | 0.36 UJ | 0.36 UJ | 0.27 UJ | 0.24 UJ | 0.14 U | 0.11 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.44 UJ | 0.41 UJ | 0.4 UJ | 0.3 UJ | 0.27 UJ | 0.16 U | 0.13 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 | GPEC-SED04 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED04(0-0.33) | GPECSED04(0.33-0.66) | GPECSED04(0.66-1.97) | GPECSED04(1.97-3.28) | GPECSED04(3.28-6.56) | GPECSED04(6.56-8.25) | GPECSED04(8.25-15.2) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.25 | 15.2 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.059 UJ | 0.054 UJ | 0.054 UJ | 0.04 UJ | 0.036 UJ | 0.021 U | 0.017 U |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 39 UJ | 36 UJ | 36 UJ | 27 UJ | 24 UJ | 14 U | 11 U |
| Silvex | | 93-72-1 | 0.098 UJ | 0.091 UJ | 0.089 UJ | 0.066 UJ | 0.06 UJ | 0.035 U | 0.028 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.098 UJ | 0.091 UJ | 0.089 UJ | 0.066 UJ | 0.06 UJ | 0.035 U | 0.028 U |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | R | R | R | R | **0.00013 J** | 0.00014 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **12600 J** | **16500 J** | **15900 J** | **14300 J** | **11600 J** | **14000 J** | **6320 J** |
| Antimony | | 7440-36-0 | **3.2 J** | **5.1 J** | **5.5 J** | **13.2 J** | **32.7 J** | **8.6 J** | **0.54 J** |
| Arsenic | | 7440-38-2 | **43.2 J** | **88.3 J** | **93.4 J** | **157 J** | **319 J** | **207 J** | **6.5 J** |
| Barium | | 7440-39-3 | **178 J** | **253 J** | **252 J** | **299 J** | **458 J** | **375 J** | **42.2 J** |
| Beryllium | | 7440-41-7 | **0.69 J** | **0.96 J** | **0.94 J** | **1 J** | **0.94 J** | **0.62 J** | **0.32 J** |
| Cadmium | | 7440-43-9 | **36.2 J** | **85.7 J** | **84.4 J** | **176 J** | **47.8 J** | **7 J** | **1 J** |
| Calcium | | 7440-70-2 | **11900 J** | **14200 J** | **14900 J** | **15500 J** | **13000 J** | **9440 J** | **20600 J** |
| Chromium | | 7440-47-3 | **322 J** | **737 J** | **722 J** | **1610 J** | **730 J** | **111** | **26.8 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **14.6 J** | **24.7 J** | **24.9 J** | **42.2 J** | **30.3 J** | **20.1** | **7.1 J** |
| Copper | | 7440-50-8 | **2110 J** | **4170 J** | **4350 J** | **8400 J** | **7890 J** | **1650 J** | **109 J** |
| Iron | | 7439-89-6 | **28900 J** | **38200 J** | **37600 J** | **37300 J** | **39800 J** | **28500** | **14900 J** |
| Lead | | 7439-92-1 | **641 J** | **1170 J** | **1160 J** | **1620 J** | **1580 J** | **621 J** | **28.9 J** |
| Magnesium | | 7439-95-4 | **11600 J** | **12200 J** | **12200 J** | **8550 J** | **5940 J** | **7080 J** | **10500 J** |
| Manganese | | 7439-96-5 | **217 J** | **280 J** | **277 J** | **248 J** | **218 J** | **251 J** | **281 J** |
| Mercury | | 7439-97-6 | **1.79 J** | **1.84 J** | **3.13 J** | **9.52 J** | **7.82 J** | **0.923** | **0.0334** |
| Nickel | | 7440-02-0 | **335 J** | **731 J** | **747 J** | **1860 J** | **2320 J** | **327** | **42 J** |
| Potassium | | 7440-09-7 | **3480 J** | **3520 J** | **3410 J** | **2750 J** | **2180 J** | **2650 J** | **2110 J** |
| Selenium | | 7782-49-2 | **5.3 J** | **9.1 J** | **12.9 J** | **13.1 J** | **25 J** | **27.6 J** | **0.9 J** |
| Silver | | 7440-22-4 | **13.2 J** | **24.9 J** | **25 J** | **44.6 J** | **23.4 J** | **5 J** | **0.5 J** |
| Sodium | | 7440-23-5 | **26400 J** | **23400 J** | **22200 J** | **15100 J** | **8570 J** | **2790 J** | **471 J** |
| Thallium | | 7440-28-0 | **0.6 J** | **0.7 J** | **0.75 J** | **0.74 J** | **2 J** | **1.7 J** | **0.19 J** |
| Tin | | 7440-31-5 | **51.4 J** | **86.8 J** | **82.6 J** | **120 J** | **167 J** | **37.1** | **2.8** |
| Vanadium | | 7440-62-2 | **63.9 J** | **104 J** | **98.4 J** | **138 J** | **71 J** | **39.9 J** | **25.6 J** |
| Zinc | | 7440-66-6 | **2280 J** | **5870 J** | **5960 J** | **13500 J** | **7970 J** | **1240 J** | **129 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.4 J** | **2.2 J** | **4.2 J** | **6.9 J** | **8 J** | **1.3 J** | **0.57 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 123 UJ | **425 J** | **589 J** | **929 J** | **1030 J** | **281** | 34.8 U |
| Black Carbon | | BC | **6350 J** | **6070 J** | **6190 J** | **7930 J** | **22300 J** | **8460 J** | **9430 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 4.9 UJ | 4.5 UJ | 4.5 UJ | 3.3 UJ | 3.0 UJ | **1.2 J** | **0.32 J** |
| pH (s.u.) | | pH | **7.8 J** | **7.7 J** | **7.7 J** | **7.5 J** | **7.7 J** | **8.3 J** | **8.6 J** |
| Sulfide | | 18496-25-8 | **11900 J** | **13700 J** | **15000 J** | **14300 J** | **16100 J** | **658 J** | **267 J** |
| Total Kjeldahl Nitrogen | | TKN | **5390 J** | **5600 J** | **8290 J** | **6810 J** | **8670 J** | **3380 J** | 209 UJ |
| Total Nitrogen | | 7727-37-9 | **5390 J** | **5600 J** | **8290 J** | **6810 J** | **8670 J** | **3380 J** | 50.0 UJ |
| Total Organic Carbon | | TOC | **98000 J** | **132000 J** | **119000 J** | **146000 J** | **176000 J** | **67600 J** | **12500 J** |
| Total Phosphorous | | 7723-14-0 | **2320 J** | **1510 J** | **3020 J** | **415 J** | **976 J** | **138 J** | **129 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED05(0-0.33) | GPECSED05(0.33-0.66) | GPECSED05(0.66-1.97) | GPECSED05(1.97-3.28) | GPECSED05(3.28-6.56) | GPECSED05(6.8-13.2 NSU) | GPECSED06(0-0.33) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.8 | 0 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **2.4 J** | **0.41 J** | **0.57 J** | NA | NA | **0.11 J** | 0.034 UJ |
| Toluene | | 108-88-3 | **5.5 J** | **0.72 J** | **0.52 J** | NA | NA | 0.32 U | 0.034 UJ |
| Ethylbenzene | | 100-41-4 | **7.1 J** | **1 J** | **2.4 J** | NA | NA | **0.81** | 0.034 UJ |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **11 J** | **1.6 J** | **3.4 J** | NA | NA | **1.4** | 0.1 UJ |
| Total BTEX | | TBTEX | **26** | **3.73** | **6.89** | NA | NA | **2.32** | ND |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 5.1 UJ | 4.5 UJ | 3.4 UJ | NA | NA | 1.3 U | 0.13 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Bromodichloromethane | | 75-27-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Bromoform | | 75-25-2 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Bromomethane | | 74-83-9 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 2-Butanone | | 78-93-3 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Carbon disulfide | | 75-15-0 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Carbon tetrachloride | | 56-23-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Chlorobenzene | | 108-90-7 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Chloroethane | | 75-00-3 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Chloroform | | 67-66-3 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Chloromethane | | 74-87-3 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Cyclohexane | | 110-82-7 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Dibromochloromethane | | 124-48-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 U |
| 1,2-Dibromoethane | | 106-93-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Dichlorodifluoromethane | | 75-71-8 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Isopropyl benzene | | 98-82-8 | **0.7 J** | 1.1 UJ | **0.24 J** | NA | NA | **0.2 J** | 0.034 UJ |
| Methyl acetate | | 79-20-9 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 UJ | 0.034 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Methylcyclohexane | | 108-87-2 | 1.3 UJ | 1.1 UJ | **0.1 J** | NA | NA | **0.71** | 0.034 UJ |
| Methylene chloride | | 75-09-2 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Styrene | | 100-42-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Tetrachloroethene | | 127-18-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 UJ | 0.034 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Trichloroethene | | 79-01-6 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Trichlorofluoromethane | | 75-69-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED05(0-0.33) | GPECSED05(0.33-0.66) | GPECSED05(0.66-1.97) | GPECSED05(1.97-3.28) | GPECSED05(3.28-6.56) | GPECSED05(6.8-13.2 NSU) | GPECSED06(0-0.33) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.8 | 0 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Vinyl chloride | | 75-01-4 | 1.3 UJ | 1.1 UJ | 0.85 UJ | NA | NA | 0.32 U | 0.034 UJ |
| Total VOCs | | TVOC | **26.7** | **3.73** | **7.23** | NA | NA | **3.23** | ND |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **6.5 J** | **5.9 J** | **41 J** | **16 J** | **24 J** | **55** | **2.8 J** |
| Acenaphthylene | | 208-96-8 | **2 J** | **2.5 J** | **8.8 J** | **5.1 J** | **7.2 J** | **7** | **4.2 J** |
| Anthracene | | 120-12-7 | **5.2 J** | **5.5 J** | **30 J** | **15 J** | **31 J** | **33** | **3.5 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.4 J** | **7.2 J** | **10 J** | **8.1 J** | **10 J** | **7.5 J** | **4.7 J** |
| Fluoranthene | | 206-44-0 | **13 J** | **15 J** | **42 J** | **28 J** | **38 J** | **29** | **15 J** |
| Fluorene | | 86-73-7 | **3.9 J** | **3.8 J** | **26 J** | **13 J** | **27 J** | **30** | 11 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **14 J** | **7.7 J** | **100 J** | **28 J** | **85 J** | **140** | 11 UJ |
| Naphthalene | | 91-20-3 | **35 J** | **18 J** | **220 J** | **46 J** | **260 J** | **150** | **3.3 J** |
| Phenanthrene | | 85-01-8 | **15 J** | **11 J** | **120 J** | **73 J** | **120 J** | **120** | 11 UJ |
| Pyrene | | 129-00-0 | **26 J** | **34 J** | **98 J** | **64 J** | **88 J** | **82** | **19 J** |
| Benz[a]anthracene | | 56-55-3 | **9.2 J** | **12 J** | **33 J** | **22 J** | **30 J** | **20** | **10 J** |
| Benzo[a]pyrene | | 50-32-8 | **7.6 J** | **10 J** | **22 J** | **15 J** | **19 J** | **17** | **9.1 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **9.2 J** | **12 J** | **20 J** | **15 J** | **19 J** | **14** | **10 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| Chrysene | | 218-01-9 | **8.8 J** | **13 J** | **28 J** | **21 J** | **28 J** | **19** | **7.1 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 8.2 UJ | 6.8 UJ | **1.8 J** | 5.1 UJ | 5.5 UJ | **0.75 J** | 11 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3 J** | **3.8 J** | **7 J** | **5.7 J** | **4.8 J** | **5.2 J** | **2.5 J** |
| Total PAHs | | TPAH | **163.8** | **161.4** | **807.6** | **374.9** | **791** | **729.45** | **91.2** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 40 UJ | 33 UJ | **11 J** | **2.6 J** | **9.9 J** | **14** | 53 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **110 J** | **250 J** | **130 J** | **120 J** | **100 J** | **1.8 J** | **84 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Caprolactam | | 105-60-2 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| Carbazole | | 86-74-8 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | **0.49 J** | 11 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 4-Chloroaniline | | 106-47-8 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| 2-Chlorophenol | | 95-57-8 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Dibenzofuran | | 132-64-9 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | **5.8 J** | 53 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| Diethyl phthalate | | 84-66-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Dimethyl phthalate | | 131-11-3 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 1,4-Dioxane | | 123-91-1 | 82 UJ | 67 UJ | 50 UJ | 51 UJ | 55 UJ | 21 UJ | 110 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| Hexachlorobutadiene | | 87-68-3 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED05(0-0.33) | GPECSED05(0.33-0.66) | GPECSED05(0.66-1.97) | GPECSED05(1.97-3.28) | GPECSED05(3.28-6.56) | GPECSED05(6.8-13.2 NSU) | GPECSED06(0-0.33) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.8 | 0 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 UJ | 53 UJ |
| Hexachloroethane | | 67-72-1 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Isophorone | | 78-59-1 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2-Methylphenol | | 95-48-7 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2-Nitroaniline | | 88-74-4 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| 3-Nitroaniline | | 99-09-2 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| 4-Nitroaniline | | 100-01-6 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| Nitrobenzene | | 98-95-3 | 82 UJ | 67 UJ | 50 UJ | 51 UJ | 55 UJ | 21 U | 110 UJ |
| 2-Nitrophenol | | 88-75-5 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 4-Nitrophenol | | 100-02-7 | 210 UJ | 170 UJ | 130 UJ | 130 UJ | 140 UJ | 53 U | 270 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Pentachlorophenol | | 87-86-5 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Phenol | | 108-95-2 | 8.2 UJ | 6.8 UJ | 5.1 UJ | 5.1 UJ | 5.5 UJ | 2.1 U | 11 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 40 UJ | 33 UJ | 25 UJ | 25 UJ | 27 UJ | 10 U | 53 UJ |
| Total SVOCs | | TSVOC | **273.8** | **411.4** | **948.6** | **497.5** | **900.9** | **751.54** | **175.2** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1221 | | 11104-28-2 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1232 | | 11141-16-5 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1242 | | 53469-21-9 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1248 | | 12672-29-6 | **2.4 J** | **3.7 J** | **8.8 J** | **9.7 J** | **4.7 J** | **0.11 J** | **3.2 J** |
| Aroclor 1254 | | 11097-69-1 | **3.4 J** | **4.9 J** | **9.8 J** | **12 J** | **7.9 J** | 0.25 U | **5.1 J** |
| Aroclor 1260 | | 11096-82-5 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1262 | | 37324-23-5 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Aroclor 1268 | | 11100-14-4 | 1 UJ | 0.86 UJ | 0.63 UJ | 0.69 UJ | 0.71 UJ | 0.25 U | 2.6 UJ |
| Total PCBs | | 1336-36-3 | **5.8** | **8.6** | **18.6** | **21.7** | **12.6** | **0.11** | **8.3** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| alpha-bhc | | 319-84-6 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| beta-BHC | | 319-85-7 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED05(0-0.33) | GPECSED05(0.33-0.66) | GPECSED05(0.66-1.97) | GPECSED05(1.97-3.28) | GPECSED05(3.28-6.56) | GPECSED05(6.8-13.2 NSU) | GPECSED06(0-0.33) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.8 | 0 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| delta-BHC | | 319-86-8 | 0.1 UJ | 0.086 UJ | **0.17 JN** | **0.13 JN** | **0.088 JN** | 0.025 U | 0.13 UJ |
| alpha-chlordane | | 5103-71-9 | 0.1 UJ | **0.18 J** | **0.32 J** | **0.34 J** | **0.28 J** | 0.025 U | 0.13 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.21 J** | **0.25 J** | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | **0.11 J** |
| oxy-Chlordane | | 27304-13-8 | 0.1 UJ | 0.086 UJ | **0.11 JN** | **0.11 JN** | **0.092 JN** | 0.025 U | 0.13 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.1 UJ | **0.12 JN** | **0.16 JN** | **0.15 JN** | **0.11 JN** | 0.025 U | 0.13 UJ |
| o,p'-DDE | | 3424-82-6 | 0.1 UJ | 0.086 UJ | **0.1 JN** | **0.099 JN** | **0.14 JN** | **0.0075 J** | 0.13 UJ |
| 4,4'-DDE | | 72-55-9 | **0.1 J** | **0.12 JN** | **0.27 JN** | **0.39 JN** | **0.46 JN** | 0.025 U | 0.13 UJ |
| o,p'-DDT | | 789-02-6 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| 4,4'-DDT | | 50-29-3 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Dieldrin | | 60-57-1 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | **0.22 J** | 0.025 U | 0.13 UJ |
| Endosulfan I | | 959-98-8 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Endosulfan II | | 33213-65-9 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.1 UJ | 0.086 UJ | **0.064 JN** | 0.069 UJ | **0.083 JN** | **0.032 JN** | 0.13 UJ |
| Endrin | | 72-20-8 | **0.084 J** | **0.17 J** | **0.39 J** | **0.32 J** | **0.27 J** | 0.025 U | **0.072 J** |
| Endrin aldehyde | | 7421-93-4 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Endrin ketone | | 53494-70-5 | 0.1 UJ | 0.086 UJ | **0.092 JN** | 0.069 UJ | **0.079 JN** | 0.025 U | 0.13 UJ |
| Heptachlor | | 76-44-8 | 0.1 UJ | 0.086 UJ | **0.16 JN** | **0.18 JN** | **0.091 JN** | 0.025 U | 0.13 UJ |
| Heptachlor epoxide | | 1024-57-3 | **0.059 J** | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 UJ | 0.13 UJ |
| Methoxychlor | | 72-43-5 | 0.2 UJ | 0.17 UJ | 0.13 UJ | 0.14 UJ | 0.14 UJ | 0.051 U | 0.26 UJ |
| Mirex | | 2385-85-5 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | 0.13 UJ |
| Mitotane | | 53-19-0 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 U | **0.16 J** |
| cis-Nonachlor | | 5103-73-1 | 0.1 UJ | 0.086 UJ | 0.063 UJ | 0.069 UJ | 0.071 UJ | 0.025 UJ | 0.13 UJ |
| trans-Nonachlor | | 39765-80-5 | 4 UJ | 3.4 UJ | 2.5 UJ | 2.8 UJ | 2.8 UJ | 1 UJ | 5.2 UJ |
| Toxaphene | | 8001-35-2 | 4 UJ | 3.4 UJ | 2.5 UJ | 2.8 UJ | 2.8 UJ | 1 U | 5.2 UJ |
| Total Pesticides | | TPEST | **0.453** | **0.84** | **1.836** | **1.719** | **1.913** | **0.0395** | **0.342** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 41 UJ | 35 UJ | 27 UJ | 28 UJ | 28 UJ | 10 U | 54 UJ |
| 2,4-D | | 94-75-7 | 0.41 UJ | 0.35 UJ | 0.27 UJ | 0.28 UJ | 0.28 UJ | 0.1 U | 0.54 UJ |
| 2,4-DB | | 94-82-6 | 0.41 UJ | 0.35 UJ | 0.27 UJ | 0.28 UJ | 0.28 UJ | 0.1 U | 0.54 UJ |
| Dicamba | | 1918-00-9 | 0.2 UJ | 0.17 UJ | 0.14 UJ | 0.14 UJ | 0.14 UJ | 0.052 U | 0.27 UJ |
| Dichloroprop | | 120-36-5 | 0.41 UJ | 0.35 UJ | 0.27 UJ | 0.28 UJ | 0.28 UJ | 0.1 U | 0.54 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.46 UJ | 0.39 UJ | 0.31 UJ | 0.31 UJ | 0.32 UJ | 0.12 U | 0.6 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED05 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED05(0-0.33) | GPECSED05(0.33-0.66) | GPECSED05(0.66-1.97) | GPECSED05(1.97-3.28) | GPECSED05(3.28-6.56) | GPECSED05(6.8-13.2 NSU) | GPECSED06(0-0.33) |
| | | Start Depth | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.8 | 0 |
| | | End Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.061 UJ | 0.052 UJ | 0.041 UJ | 0.041 UJ | 0.043 UJ | 0.016 U | 0.081 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 41 UJ | 35 UJ | **7.4 J** | 28 UJ | 28 UJ | 10 U | 54 UJ |
| Silvex | | 93-72-1 | 0.1 UJ | 0.087 UJ | 0.068 UJ | 0.069 UJ | 0.071 UJ | 0.026 U | 0.13 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.1 UJ | 0.087 UJ | 0.068 UJ | 0.069 UJ | 0.071 UJ | 0.026 U | 0.13 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00051 UJ | 0.00045 UJ | 0.00034 UJ | R | 0.00035 UJ | R | 0.00067 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **14100 J** | **14200 J** | **14100 J** | **13600 J** | **13400 J** | **4900** | **11500 J** |
| Antimony | | 7440-36-0 | **3.9 J** | **6.3 J** | **15.8 J** | **21.5 J** | **32.3 J** | **1.1 J** | **3.1 J** |
| Arsenic | | 7440-38-2 | **47.8 J** | **84.6 J** | **185 J** | **197 J** | **218 J** | **16.1 J** | **26.5 J** |
| Barium | | 7440-39-3 | **200 J** | **230 J** | **321 J** | **329 J** | **328 J** | **64.4 J** | **134 J** |
| Beryllium | | 7440-41-7 | **0.78 J** | **0.86 J** | **1.1 J** | **1.1 J** | **1.1 J** | **0.26** | **0.57 J** |
| Cadmium | | 7440-43-9 | **42.7 J** | **88.6 J** | **200 J** | **243 J** | **193 J** | **0.76 J** | **24.6 J** |
| Calcium | | 7440-70-2 | **12400 J** | **13200 J** | **16000 J** | **16300 J** | **17600 J** | **8760 J** | **9030 J** |
| Chromium | | 7440-47-3 | **386 J** | **755 J** | **1800 J** | **1810 J** | **1400 J** | **25.3** | **202 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **16.6 J** | **24 J** | **45.4 J** | **52.9 J** | **42.1 J** | **5.6** | **10.0 J** |
| Copper | | 7440-50-8 | **2370 J** | **4390 J** | **10100 J** | **11600 J** | **10000 J** | **164 J** | **1300 J** |
| Iron | | 7439-89-6 | **33200 J** | **35700 J** | **38700 J** | **40900 J** | **43100 J** | **12400** | **25000 J** |
| Lead | | 7439-92-1 | **726 J** | **1120 J** | **1560 J** | **1630 J** | **1670 J** | **162 J** | **473 J** |
| Magnesium | | 7439-95-4 | **12100 J** | **11000 J** | **7980 J** | **7300 J** | **6770 J** | **5070** | **11000 J** |
| Manganese | | 7439-96-5 | **245 J** | **265 J** | **247 J** | **238 J** | **248 J** | **186 J** | **170 J** |
| Mercury | | 7439-97-6 | **1.52 J** | **3.42 J** | **6.69 J** | **7.64 J** | **8.43 J** | **0.244** | **2.81 J** |
| Nickel | | 7440-02-0 | **388 J** | **753 J** | **2070 J** | **2560 J** | **3630 J** | **34** | **201 J** |
| Potassium | | 7440-09-7 | **3640 J** | **3200 J** | **2640 J** | **2470 J** | **2490 J** | **1120** | **3290 J** |
| Selenium | | 7782-49-2 | **5.9 J** | **8.8 J** | **15.5 J** | **15.6 J** | **13.5 J** | **2.9 J** | **2.9 J** |
| Silver | | 7440-22-4 | **16.3 J** | **25.7 J** | **45.7 J** | **44.2 J** | **43.6 J** | **0.58 J** | **8.9 J** |
| Sodium | | 7440-23-5 | **25700 J** | **21900 J** | **13100 J** | **10600 J** | **8720 J** | **398 J** | **30500 J** |
| Thallium | | 7440-28-0 | **0.63 J** | **0.67 J** | **0.79 J** | **0.72 J** | **0.83 J** | **0.2 J** | **0.49 J** |
| Tin | | 7440-31-5 | **56.9 J** | **83.3 J** | **124 J** | **131 J** | **155 J** | **15.8** | **39.2 J** |
| Vanadium | | 7440-62-2 | **71.7 J** | **102 J** | **86.9 J** | **91.9 J** | **126 J** | **17.8 J** | **46.3 J** |
| Zinc | | 7440-66-6 | **2690 J** | **5910 J** | **14100 J** | **15200 J** | **13000 J** | **154 J** | **1550 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **9 J** | **11 J** | **19.9 J** | **11.5 J** | **4.7 J** | **0.19 J** | **9.0 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 128 UJ | **509 J** | **923 J** | **995 J** | **1120 J** | 32.4 U | **491 J** |
| Black Carbon | | BC | **6990 J** | **7600 J** | **15500 J** | **11200 J** | **12200 J** | **9270 J** | **8010 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 5.1 UJ | 4.5 UJ | 3.4 UJ | 3.5 UJ | 3.5 UJ | 1.3 U | **2.2 J** |
| pH (s.u.) | | pH | **7.6 J** | **7.9 J** | **7.8 J** | **7.8 J** | **7.9 J** | **8.6 J** | **8.1 J** |
| Sulfide | | 18496-25-8 | **8880 J** | **14400 J** | **17100 J** | **12700 J** | **19500 J** | **41.5 J** | **13300 J** |
| Total Kjeldahl Nitrogen | | TKN | **7450 J** | **6500 J** | **6510 J** | **7680 J** | **9280 J** | **875 J** | 1010 UJ |
| Total Nitrogen | | 7727-37-9 | **7450 J** | **6500 J** | **6510 J** | **7680 J** | **9280 J** | **875 J** | 50.0 UJ |
| Total Organic Carbon | | TOC | **97600 J** | **113000 J** | **137000 J** | **154000 J** | **156000 J** | **15300 J** | **77900 J** |
| Total Phosphorous | | 7723-14-0 | **1330 J** | **3370 J** | **1150 J** | **4920 J** | **5290 J** | **395 J** | **211 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED06(0.33-0.66) | GPECSED06(0.66-1.97) | GPECSED06(1.97-3.28) | GPECSED06(3.28-6.56) | GPECSED06(6.56-9.84) | GPECSED06(9.84-12.0) | GPECSED06(12.0-14.9)NSU |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 | 14.9 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | **0.7 J** | **8.9 J** | **33 J** | **0.5 J** |
| Toluene | | 108-88-3 | NA | NA | NA | **0.23 J** | **18 J** | **84 J** | **1.1 J** |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | **2 J** | **28 J** | **110 J** | **9.8 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | **2.3 J** | **32 J** | **130 J** | **8.4 J** |
| Total BTEX | | TBTEX | NA | NA | NA | **5.23** | **86.9** | **357** | **19.8** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | 3.1 UJ | 3 UJ | 21 UJ | 1.2 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Bromoform | | 75-25-2 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Bromomethane | | 74-83-9 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 2-Butanone | | 78-93-3 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | **0.17 J** | 0.75 UJ | 5.3 UJ | 0.31 U |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | 0.77 UJ | **0.089 J** | 5.3 UJ | 0.31 U |
| Chloroethane | | 75-00-3 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Chloroform | | 67-66-3 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Chloromethane | | 74-87-3 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | 0.77 UJ | **0.2 J** | 5.3 UJ | 0.31 U |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | **0.24 J** | **2.5 J** | **9.2 J** | **3.5** |
| Methyl acetate | | 79-20-9 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | **0.14 J** | **1.1 J** | **0.98 J** | **0.17 J** |
| Methylene chloride | | 75-09-2 | NA | NA | NA | 0.77 U | 0.75 UJ | 5.3 UJ | 0.31 U |
| Styrene | | 100-42-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | 0.77 UJ | 0.75 U | 5.3 UJ | 0.31 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Trichloroethene | | 79-01-6 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED06(0.33-0.66) | GPECSED06(0.66-1.97) | GPECSED06(1.97-3.28) | GPECSED06(3.28-6.56) | GPECSED06(6.56-9.84) | GPECSED06(9.84-12.0) | GPECSED06(12.0-14.9)NSU |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 | 14.9 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | 0.77 UJ | 0.75 UJ | 5.3 UJ | 0.31 U |
| Total VOCs | | TVOC | NA | NA | NA | **5.78** | **90.789** | **367.18** | **23.47** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **3.4 J** | **10 J** | **17 J** | **89 J** | **210 J** | **1500 J** | **100** |
| Acenaphthylene | | 208-96-8 | **3.4 J** | **15 J** | **8.7 J** | **35 J** | **62 J** | **1100 J** | **16** |
| Anthracene | | 120-12-7 | **3.3 J** | **12 J** | **17 J** | **73 J** | **140 J** | **1100 J** | **45** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.3 J** | **17 J** | **7.8 J** | **31 J** | **41 J** | **260 J** | **11** |
| Fluoranthene | | 206-44-0 | **15 J** | **34 J** | **36 J** | **100 J** | **150 J** | **1100 J** | **45** |
| Fluorene | | 86-73-7 | 9.5 UJ | 15 UJ | **14 J** | **62 J** | **140 J** | **1200 J** | **46** |
| 2-Methylnaphthalene | | 91-57-6 | **1.4 J** | **2.7 J** | **20 J** | **210 J** | **670 J** | **6800 J** | **220 J** |
| Naphthalene | | 91-20-3 | **3.9 J** | **7.3 J** | **45 J** | **380 J** | **2000 J** | **15000 J** | **220 J** |
| Phenanthrene | | 85-01-8 | 9.5 UJ | 15 UJ | **56 J** | **230 J** | **460 J** | **4000 J** | **160** |
| Pyrene | | 129-00-0 | **22 J** | **58 J** | **54 J** | **180 J** | **270 J** | **2000 J** | **81** |
| Benz[a]anthracene | | 56-55-3 | **8.6 J** | **32 J** | **22 J** | **74 J** | **97 J** | **620 J** | **26** |
| Benzo[a]pyrene | | 50-32-8 | **7.6 J** | **27 J** | **14 J** | **57 J** | **70 J** | **530 J** | **21** |
| Benzo[b]fluoranthene | | 205-99-2 | **9.9 J** | **26 J** | **15 J** | **50 J** | **66 J** | **420 J** | **17** |
| Benzo[k]fluoranthene | | 207-08-9 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Chrysene | | 218-01-9 | **8.5 J** | **36 J** | **24 J** | **72 J** | **97 J** | **630 J** | **26** |
| Dibenz[a,h]anthracene | | 53-70-3 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | **10 J** | **47 J** | **2.1 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3 J** | **11 J** | **6.4 J** | **20 J** | **26 J** | **160 J** | **7** |
| Total PAHs | | TPAH | **95.3** | **288** | **356.9** | **1663** | **4509** | **36467** | **1043.1** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 47 UJ | 74 UJ | 100 UJ | **22 J** | **59 J** | **540 J** | **22** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 9.5 U | 15 U | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **84 J** | **560 J** | **300 J** | **190 J** | **100 J** | 340 UJ | 39 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Butyl benzyl phthalate | | 85-68-7 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Caprolactam | | 105-60-2 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| Carbazole | | 86-74-8 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | **26 J** | **0.65 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 4-Chloroaniline | | 106-47-8 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2-Chloronaphthalene | | 91-58-7 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| 2-Chlorophenol | | 95-57-8 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Dibenzofuran | | 132-64-9 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | **220 J** | **8.7 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2,4-Dichlorophenol | | 120-83-2 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Diethyl phthalate | | 84-66-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Dimethyl phthalate | | 131-11-3 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2,4-Dimethylphenol | | 105-67-9 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Di-n-butyl phthalate | | 84-74-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| 2,4-Dinitrophenol | | 51-28-5 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 1,4-Dioxane | | 123-91-1 | 95 UJ | 150 UJ | 210 UJ | 190 UJ | 190 UJ | 340 UJ | 39 U |
| Di-n-octyl phthalate | | 117-84-0 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Hexachlorobutadiene | | 87-68-3 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED06(0.33-0.66) | GPECSED06(0.66-1.97) | GPECSED06(1.97-3.28) | GPECSED06(3.28-6.56) | GPECSED06(6.56-9.84) | GPECSED06(9.84-12.0) | GPECSED06(12.0-14.9)NSU |
| | | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 |
| | | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 | 14.9 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 UJ |
| Hexachloroethane | | 67-72-1 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Isophorone | | 78-59-1 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2-Methylphenol | | 95-48-7 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2-Nitroaniline | | 88-74-4 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| 3-Nitroaniline | | 99-09-2 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| 4-Nitroaniline | | 100-01-6 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| Nitrobenzene | | 98-95-3 | 95 UJ | 150 UJ | 210 UJ | 190 UJ | 190 UJ | 340 UJ | 39 U |
| 2-Nitrophenol | | 88-75-5 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 4-Nitrophenol | | 100-02-7 | 240 UJ | 380 UJ | 540 UJ | 470 UJ | 480 UJ | 870 UJ | 100 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Pentachlorophenol | | 87-86-5 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Phenol | | 108-95-2 | 9.5 UJ | 15 UJ | 21 UJ | 19 UJ | 19 UJ | 34 UJ | 3.9 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 47 UJ | 74 UJ | 100 UJ | 92 UJ | 93 UJ | 170 UJ | 19 U |
| Total SVOCs | | TSVOC | **179.3** | **848** | **656.9** | **1875** | **4668** | **37253** | **1074.45** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1221 | | 11104-28-2 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1232 | | 11141-16-5 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1242 | | 53469-21-9 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1248 | | 12672-29-6 | **4.5 J** | **24 J** | **34 J** | **34 J** | **17 J** | **6.5 J** | **1.8 J** |
| Aroclor 1254 | | 11097-69-1 | **6.9 J** | **16 J** | **29 J** | **32 J** | **17 J** | **3.9 J** | 0.49 U |
| Aroclor 1260 | | 11096-82-5 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1262 | | 37324-23-5 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Aroclor 1268 | | 11100-14-4 | 2.3 UJ | 1.9 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ | 0.84 UJ | 0.49 U |
| Total PCBs | | 1336-36-3 | **11.4** | **40** | **63** | **66** | **34** | **10.4** | **1.8** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | **12000 J** | **15000 J** | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | **9500 J** | **4700 J** | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | **9800 J** | **12000 J** | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | **230 J** | **260 J** | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | **17000 J** | **10000 J** | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | **7200 J** | **9600 J** | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | **810 J** | **1000 J** | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | **16 J** | **13 J** | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | **3100 J** | **1800 J** | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | **1300 J** | **2200 J** | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | **170 J** | **57 J** | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | **310 J** | **220 J** | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | **250 J** | **110 J** | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | **360 J** | **280 J** | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | **7400 J** | **7500 J** | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | **73000 J** | **38000 J** | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | **4400 J** | **5700 J** | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | **340 J** | **340 J** | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | **760 J** | **620 J** | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | **110 J** | **52 J** | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | **400 J** | **580 J** | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | **4700 J** | **4300 J** | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | **510 J** | **490 J** | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | **230 J** | **220 J** | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | **40 J** | **41 J** | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.11 UJ | 0.094 UJ | **0.21 J** | **0.26 J** | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| alpha-bhc | | 319-84-6 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | **0.048 JN** | 0.024 UJ |
| beta-BHC | | 319-85-7 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED06(0.33-0.66) | GPECSED06(0.66-1.97) | GPECSED06(1.97-3.28) | GPECSED06(3.28-6.56) | GPECSED06(6.56-9.84) | GPECSED06(9.84-12.0) | GPECSED06(12.0-14.9)NSU |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 | 14.9 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| delta-BHC | | 319-86-8 | 0.11 UJ | **0.13 J** | **0.25 J** | **0.13 JN** | **0.085 JN** | 0.042 UJ | 0.024 UJ |
| alpha-chlordane | | 5103-71-9 | 0.11 UJ | **0.21 J** | **0.37 J** | **0.35 J** | **0.11 JN** | 0.042 UJ | 0.024 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.069 J** | **0.33 J** | **0.58 J** | **0.52 J** | **0.15 JN** | 0.042 UJ | 0.024 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.11 UJ | **0.21 JN** | **0.23 JN** | **0.29 JN** | **0.21 J** | 0.042 UJ | 0.024 UJ |
| o,p'-DDE | | 3424-82-6 | 0.11 UJ | 0.094 UJ | **0.1 JN** | **0.37 JN** | **0.14 JN** | **0.12 JN** | 0.024 UJ |
| 4,4'-DDE | | 72-55-9 | 0.11 UJ | **0.13 JN** | **0.24 JN** | **0.33 JN** | **0.35 JN** | **0.038 J** | 0.024 UJ |
| o,p'-DDT | | 789-02-6 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| 4,4'-DDT | | 50-29-3 | 0.11 UJ | 0.094 UJ | 0.072 UJ | **0.52 J** | **0.35 J** | 0.042 UJ | 0.024 UJ |
| Dieldrin | | 60-57-1 | 0.11 UJ | 0.094 UJ | 0.072 UJ | **0.19 JN** | **0.15 J** | 0.042 UJ | 0.024 UJ |
| Endosulfan I | | 959-98-8 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Endosulfan II | | 33213-65-9 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | **0.086 JN** | **0.11 JN** | 0.024 UJ |
| Endrin | | 72-20-8 | **0.081 J** | **0.23 J** | **0.34 J** | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Endrin ketone | | 53494-70-5 | 0.11 UJ | 0.094 UJ | **0.13 JN** | **0.098 JN** | **0.061 JN** | **0.054 JN** | 0.024 UJ |
| Heptachlor | | 76-44-8 | 0.11 UJ | 0.094 UJ | **0.15 JN** | **0.11 JN** | **0.065 JN** | 0.042 UJ | 0.024 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.11 UJ | 0.094 UJ | **0.49 J** | **0.084 JN** | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | **0.032 J** | 0.042 UJ | 0.024 UJ |
| Methoxychlor | | 72-43-5 | 0.23 UJ | 0.19 UJ | 0.14 UJ | **0.42 JN** | **0.43 JN** | 0.084 UJ | 0.049 UJ |
| Mirex | | 2385-85-5 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| Mitotane | | 53-19-0 | **0.16 J** | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | 0.042 UJ | 0.024 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.11 UJ | 0.094 UJ | 0.072 UJ | 0.06 UJ | 0.056 UJ | **0.06 J** | 0.024 UJ |
| trans-Nonachlor | | 39765-80-5 | 4.6 UJ | 3.8 UJ | 2.9 UJ | 2.4 UJ | 2.3 UJ | 1.7 UJ | 0.98 UJ |
| Toxaphene | | 8001-35-2 | 4.6 UJ | 3.8 UJ | 2.9 UJ | 2.4 UJ | 2.3 UJ | 1.7 UJ | 0.98 UJ |
| Total Pesticides | | TPEST | **0.31** | **1.24** | **3.09** | **3.672** | **2.219** | **0.43** | ND |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | **0.00061 J** | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | **0.00057 J** | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | **0.49 J** | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | **0.71 J** | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | **0.36 J** | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | **0.028 J** | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | **0.43 J** | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | **0.039 J** | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | **0.23 J** | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | 0.0025 UJ | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | 0.0021 UJ | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | 0.0017 UJ | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | 0.0016 UJ | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | **0.00052 J** | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | 0.0013 UJ | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | **0.0002 J** | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | **0.093 J** | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | **0.02 J** | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | **0.0037 J** | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | **0.19 J** | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | **0.12 J** | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | **0.29 J** | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | 0.33 UJ | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | **3.0056** | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 47 UJ | 38 UJ | 29 UJ | 25 UJ | 24 UJ | 17 UJ | 9.8 U |
| 2,4-D | | 94-75-7 | 0.47 UJ | 0.38 UJ | 0.29 UJ | 0.25 UJ | 0.24 UJ | 0.17 UJ | 0.098 U |
| 2,4-DB | | 94-82-6 | 0.47 UJ | 0.38 UJ | 0.29 UJ | 0.25 UJ | 0.24 UJ | 0.17 UJ | 0.098 U |
| Dicamba | | 1918-00-9 | 0.24 UJ | 0.19 UJ | 0.14 UJ | 0.12 UJ | 0.12 UJ | 0.085 UJ | 0.049 U |
| Dichloroprop | | 120-36-5 | 0.47 UJ | 0.38 UJ | 0.29 UJ | 0.25 UJ | 0.24 UJ | 0.17 UJ | 0.098 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.53 UJ | 0.42 UJ | 0.32 UJ | 0.28 UJ | 0.27 UJ | 0.19 UJ | 0.11 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 | GPEC-SED06 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED06(0.33-0.66) | GPECSED06(0.66-1.97) | GPECSED06(1.97-3.28) | GPECSED06(3.28-6.56) | GPECSED06(6.56-9.84) | GPECSED06(9.84-12.0) | GPECSED06(12.0-14.9)NSU |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 9.84 | 12 | 14.9 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.071 UJ | 0.056 UJ | 0.043 UJ | 0.037 UJ | 0.036 UJ | 0.026 UJ | 0.015 U |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 47 UJ | 38 UJ | 29 UJ | 25 UJ | 24 UJ | 17 UJ | 9.8 U |
| Silvex | | 93-72-1 | 0.12 UJ | 0.094 UJ | 0.072 UJ | 0.062 UJ | 0.06 UJ | 0.043 UJ | 0.024 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.12 UJ | 0.094 UJ | 0.072 UJ | 0.062 UJ | 0.06 UJ | 0.043 UJ | 0.024 U |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00059 UJ | 0.00047 UJ | R | R | 0.0003 UJ | 0.00021 UJ | 0.00012 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **16800 J** | **15800 J** | **13500 J** | **13500 J** | **12700 J** | **5960 J** | **2500** |
| Antimony | | 7440-36-0 | **3.7 J** | **5.6 J** | **11.1 J** | **18.3 J** | **26.0 J** | **14.9 J** | 0.12 UJ |
| Arsenic | | 7440-38-2 | **41.2 J** | **68.3 J** | **105 J** | **147 J** | **199 J** | **149 J** | **1.1 J** |
| Barium | | 7440-39-3 | **200 J** | **200 J** | **227 J** | **290 J** | **287 J** | **250 J** | **7.0 J** |
| Beryllium | | 7440-41-7 | **0.84 J** | **0.83 J** | **0.84 J** | **0.95 J** | **0.93 J** | **0.60 J** | **0.11** |
| Cadmium | | 7440-43-9 | **41.0 J** | **78.1 J** | **127 J** | **166 J** | **115 J** | **10.4 J** | **0.050 J** |
| Calcium | | 7440-70-2 | **14300 J** | **12600 J** | **11900 J** | **12600 J** | **15200 J** | **4610 J** | **4750 J** |
| Chromium | | 7440-47-3 | **334 J** | **629 J** | **1220 J** | **1190 J** | **1150 J** | **123 J** | **4.9 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **15.1 J** | **19.6 J** | **29.1 J** | **34.7 J** | **32.2 J** | **9.2 J** | **2.2 J** |
| Copper | | 7440-50-8 | **2110 J** | **3600 J** | **8950 J** | **9970 J** | **9120 J** | **3080 J** | **9.9 J** |
| Iron | | 7439-89-6 | **34800 J** | **35000 J** | **28000 J** | **31000 J** | **37500 J** | **16800 J** | **6230 J** |
| Lead | | 7439-92-1 | **792 J** | **1060 J** | **1370 J** | **1440 J** | **1640 J** | **745 J** | **5.7 J** |
| Magnesium | | 7439-95-4 | **14400 J** | **12000 J** | **7630 J** | **6870 J** | **6660 J** | **2800 J** | **4020 J** |
| Manganese | | 7439-96-5 | **251 J** | **245 J** | **192 J** | **192 J** | **212 J** | **112 J** | **73.8 J** |
| Mercury | | 7439-97-6 | **2.45 J** | **5.15 J** | **1.13 J** | **6.74 J** | **8.36 J** | **4.93 J** | **0.0708** |
| Nickel | | 7440-02-0 | **324 J** | **612 J** | **1950 J** | **1800 J** | **2450 J** | **580 J** | **6.1 J** |
| Potassium | | 7440-09-7 | **4190 J** | **3130 J** | **2190 J** | **2220 J** | **2130 J** | **1060 J** | **397 J** |
| Selenium | | 7782-49-2 | **4.6 J** | **6.7 J** | **8.2 J** | **9.8 J** | **10.3 J** | **14.7 J** | 0.31 U |
| Silver | | 7440-22-4 | **15.0 J** | **22.3 J** | **35.2 J** | **33.4 J** | **29.6 J** | **8.4 J** | **0.015 J** |
| Sodium | | 7440-23-5 | **29800 J** | **19900 J** | **10200 J** | **9330 J** | **9500 J** | **3920 J** | **94.1 J** |
| Thallium | | 7440-28-0 | **0.74 J** | **0.62 J** | **0.61 J** | **0.72 J** | **0.90 J** | **2.8 J** | **0.052 J** |
| Tin | | 7440-31-5 | **61.0 J** | **79.9 J** | **92.6 J** | **112 J** | **161 J** | **63.9 J** | **1.8 J** |
| Vanadium | | 7440-62-2 | **69.2 J** | **107 J** | **74.9 J** | **79.7 J** | **82.4 J** | **21.6 J** | **9.6 J** |
| Zinc | | 7440-66-6 | **2550 J** | **4350 J** | **14000 J** | **14000 J** | **11900 J** | **1970 J** | **19.3 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.6 J** | **1.9 J** | **3.6 J** | **10.7 J** | **9.4 J** | **22.6 J** | 0.61 U |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **478 J** | **928 J** | **1390 J** | **1720 J** | **2270 J** | **891 J** | 6.1 UJ |
| Black Carbon | | BC | **6770 J** | **8460 J** | **7740 J** | **25500 J** | **20100 J** | **132000 J** | **27900 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.8 J** | **1.9 J** | **2.1 J** | **1.8 J** | **2.3 J** | **2.6 J** | **0.43 J** |
| pH (s.u.) | | pH | **8.1 J** | **7.6 J** | **7.4 J** | **7.8 J** | **7.8 J** | **7.9 J** | **8.5 J** |
| Sulfide | | 18496-25-8 | **14600 J** | **17500 J** | **14800 J** | **18400 J** | **22700 J** | **3770 J** | **563** |
| Total Kjeldahl Nitrogen | | TKN | 889 UJ | 705 UJ | 536 UJ | **8970 J** | **8630 J** | **6090 J** | 184 UJ |
| Total Nitrogen | | 7727-37-9 | 50.0 UJ | 50.0 UJ | 50.0 UJ | **8970 J** | **8630 J** | **6090 J** | 50.0 UJ |
| Total Organic Carbon | | TOC | **119000 J** | **94300 J** | **118000 J** | **136000 J** | **168000 J** | **219000 J** | **12300 J** |
| Total Phosphorous | | 7723-14-0 | **481 J** | **129 J** | **682 J** | **1370 J** | **8820 J** | **626 J** | **118 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSEDXX062110 | GPECSED07(0-0.33) | GPECSED07(0.33-0.66) | GPECSED07(0.66-1.97) | GPECSED07(1.97-3.28) | GPECSED07(3.28-6.56) | GPECSED07(6.56-9.1) |
| | | Start Depth | 12 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | End Depth | 14.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | GPECSED06(12.0-14.9)NSU | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.19 J** | **0.76 J** | NA | NA | NA | **0.75 J** | NA |
| Toluene | | 108-88-3 | **0.13 J** | **1.6 J** | NA | NA | NA | **2 J** | NA |
| Ethylbenzene | | 100-41-4 | **3.2 J** | **2.4 J** | NA | NA | NA | **9.4 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **2.9 J** | **4.1 J** | NA | NA | NA | **16 J** | NA |
| Total BTEX | | TBTEX | **6.42** | **8.86** | NA | NA | NA | **28.15** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 1.2 UJ | 4.5 UJ | NA | NA | NA | 2.8 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Bromodichloromethane | | 75-27-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Bromoform | | 75-25-2 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Bromomethane | | 74-83-9 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 2-Butanone | | 78-93-3 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Carbon disulfide | | 75-15-0 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Chlorobenzene | | 108-90-7 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Chloroethane | | 75-00-3 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Chloroform | | 67-66-3 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Chloromethane | | 74-87-3 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Cyclohexane | | 110-82-7 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Dibromochloromethane | | 124-48-1 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | 0.3 UJ | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Isopropyl benzene | | 98-82-8 | **1.1 J** | **0.31 J** | NA | NA | NA | **1.3 J** | NA |
| Methyl acetate | | 79-20-9 | 0.3 UJ | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.3 UJ | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Methylcyclohexane | | 108-87-2 | 0.3 U | 1.1 UJ | NA | NA | NA | **0.33 J** | NA |
| Methylene chloride | | 75-09-2 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Styrene | | 100-42-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Tetrachloroethene | | 127-18-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Trichloroethene | | 79-01-6 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSEDXX062110 | GPECSED07(0-0.33) | GPECSED07(0.33-0.66) | GPECSED07(0.66-1.97) | GPECSED07(1.97-3.28) | GPECSED07(3.28-6.56) | GPECSED07(6.56-9.1) |
| | | Start Depth | 12 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | End Depth | 14.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | GPECSED06(12.0-14.9)NSU | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.3 UJ | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Vinyl chloride | | 75-01-4 | 0.3 U | 1.1 UJ | NA | NA | NA | 0.69 UJ | NA |
| Total VOCs | | TVOC | **7.52** | **9.17** | NA | NA | NA | **29.78** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **150** | **2.3 J** | **4.2 J** | **7.1 J** | **27 J** | **1100 J** | **39** |
| Acenaphthylene | | 208-96-8 | **19** | **1.6 J** | **4.6 J** | **4.6 J** | **11 J** | **190 J** | **7.3** |
| Anthracene | | 120-12-7 | **67** | **2.3 J** | **6.1 J** | **8.2 J** | **27 J** | **620 J** | **36** |
| Benzo[g,h,i]perylene | | 191-24-2 | **16** | **3.4 J** | **8.2 J** | **6.7 J** | **15 J** | **140 J** | **7.3** |
| Fluoranthene | | 206-44-0 | **62** | **7.4 J** | **18 J** | **24 J** | **37 J** | **560 J** | **47** |
| Fluorene | | 86-73-7 | **66** | **1.8 J** | 6.8 UJ | 6.3 UJ | **20 J** | **610 J** | **22** |
| 2-Methylnaphthalene | | 91-57-6 | **380 J** | **4.6 J** | **2.5 J** | **3.7 J** | **65 J** | **3300 J** | **66** |
| Naphthalene | | 91-20-3 | **690 J** | **13 J** | **5.9 J** | **9.8 J** | **120 J** | **5000 J** | **160** |
| Phenanthrene | | 85-01-8 | **230** | 7.2 UJ | 6.8 UJ | **8.9 J** | **98 J** | **100 J** | **120** |
| Pyrene | | 129-00-0 | **130** | **13 J** | **30 J** | **40 J** | **73 J** | **59 J** | **75** |
| Benz[a]anthracene | | 56-55-3 | **41** | **5.6 J** | **14 J** | **19 J** | **30 J** | **310 J** | **31** |
| Benzo[a]pyrene | | 50-32-8 | **34** | **4.8 J** | **11 J** | **12 J** | **23 J** | **270 J** | **19** |
| Benzo[b]fluoranthene | | 205-99-2 | **28** | **6.5 J** | **8.6 J** | **14 J** | **21 J** | **210 J** | **16** |
| Benzo[k]fluoranthene | | 207-08-9 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Chrysene | | 218-01-9 | **38** | **5.4 J** | **14 J** | **17 J** | **28 J** | **290 J** | **28** |
| Dibenz[a,h]anthracene | | 53-70-3 | **3.8 J** | **1.3 J** | **3.4 J** | 6.3 UJ | 10 UJ | **32 J** | **2.3 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **9.2** | **2.9 J** | **4.1 J** | **5 J** | **8.1 J** | **82 J** | **5.2** |
| Total PAHs | | TPAH | **1964** | **75.9** | **134.6** | **180** | **603.1** | **12873** | **681.1** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **34 J** | 35 UJ | 33 UJ | 31 UJ | **7.9 J** | **280 J** | **6.1 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 76 U | **44 J** | **160 J** | **510 J** | **92 J** | 890 UJ | **3.2 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Butyl benzyl phthalate | | 85-68-7 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Caprolactam | | 105-60-2 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| Carbazole | | 86-74-8 | **2.1 J** | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | **2.6 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 4-Chloroaniline | | 106-47-8 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2-Chloronaphthalene | | 91-58-7 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| 2-Chlorophenol | | 95-57-8 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Dibenzofuran | | 132-64-9 | **13 J** | 35 UJ | 33 UJ | 31 UJ | 49 UJ | **120 J** | **7.5 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2,4-Dichlorophenol | | 120-83-2 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Diethyl phthalate | | 84-66-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Dimethyl phthalate | | 131-11-3 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2,4-Dimethylphenol | | 105-67-9 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Di-n-butyl phthalate | | 84-74-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| 2,4-Dinitrophenol | | 51-28-5 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 1,4-Dioxane | | 123-91-1 | 76 U | 71 UJ | 67 UJ | 63 UJ | 99 UJ | 890 UJ | 31 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Hexachlorobutadiene | | 87-68-3 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED06 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSEDXX062110 | GPECSED07(0-0.33) | GPECSED07(0.33-0.66) | GPECSED07(0.66-1.97) | GPECSED07(1.97-3.28) | GPECSED07(3.28-6.56) | GPECSED07(6.56-9.1) |
| | | | Start Depth | 12 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | | End Depth | 14.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.1 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/21/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | | Parent Sample Code | GPECSED06(12.0-14.9)NSU | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 UJ |
| Hexachloroethane | | 67-72-1 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Isophorone | | 78-59-1 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2-Methylphenol | | 95-48-7 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2-Nitroaniline | | 88-74-4 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| 3-Nitroaniline | | 99-09-2 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| 4-Nitroaniline | | 100-01-6 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| Nitrobenzene | | 98-95-3 | 76 U | 71 UJ | 67 UJ | 63 UJ | 99 UJ | 890 UJ | 31 U |
| 2-Nitrophenol | | 88-75-5 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 4-Nitrophenol | | 100-02-7 | 190 U | 180 UJ | 170 UJ | 160 UJ | 250 UJ | 2300 UJ | 79 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Pentachlorophenol | | 87-86-5 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Phenol | | 108-95-2 | 7.6 U | 7.2 UJ | 6.8 UJ | 6.3 UJ | 10 UJ | 89 UJ | 3.1 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 38 U | 35 UJ | 33 UJ | 31 UJ | 49 UJ | 440 UJ | 15 U |
| Total SVOCs | | TSVOC | **2013.1** | **119.9** | **294.6** | **690** | **703** | **13273** | **700.5** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1221 | | 11104-28-2 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1232 | | 11141-16-5 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1242 | | 53469-21-9 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1248 | | 12672-29-6 | **1.8 J** | **1.6 J** | **4.1 J** | **7.1 J** | **11 J** | **4.1 J** | 0.39 U |
| Aroclor 1254 | | 11097-69-1 | **0.86 J** | **2.8 J** | **5.8 J** | **10 J** | **13 J** | **5 J** | 0.39 U |
| Aroclor 1260 | | 11096-82-5 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1262 | | 37324-23-5 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Aroclor 1268 | | 11100-14-4 | 0.24 U | 0.89 UJ | 0.88 UJ | 0.77 UJ | 0.57 UJ | 0.55 UJ | 0.39 U |
| Total PCBs | | 1336-36-3 | **2.66** | **4.4** | **9.9** | **17.1** | **24** | **9.1** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | **9100 J** | NA | NA | NA | **800** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | **3600 J** | NA | NA | NA | **180** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | **6900 J** | NA | NA | NA | **620** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | **190 J** | NA | NA | NA | **37 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | **7300 J** | NA | NA | NA | **380** |
| Total HxCDF | | 55684-94-1 | NA | NA | **5700 J** | NA | NA | NA | **510** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | **590 J** | NA | NA | NA | **56 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | **12 J** | NA | NA | NA | **6.4 J** |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | **1700 J** | NA | NA | NA | **130** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | **1200 J** | NA | NA | NA | **94** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | **74 J** | NA | NA | NA | **5.5 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | **170 J** | NA | NA | NA | **11 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | **120 J** | NA | NA | NA | **10 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | **220 J** | NA | NA | NA | **27 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | **4800 J** | NA | NA | NA | **360** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | **34000 J** | NA | NA | NA | **4000** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | **3800 J** | NA | NA | NA | **420** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | **210 J** | NA | NA | NA | **35 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | **710 J** | NA | NA | NA | **41** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | **66 J** | NA | NA | NA | **5.3 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | **350 J** | NA | NA | NA | **42 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | **2800 J** | NA | NA | NA | **420** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | **440 J** | NA | NA | NA | **47** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | **160 J** | NA | NA | NA | **43** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | **31 J** | NA | NA | NA | **3.5 J** |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.024 UJ | 0.089 UJ | 0.082 UJ | **0.18 JN** | **0.21 J** | 0.055 UJ | 0.039 UJ |
| alpha-bhc | | 319-84-6 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.24 JN** | 0.039 UJ |
| beta-BHC | | 319-85-7 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.34 JN** | 0.039 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED06 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSEDXX062110 | GPECSED07(0-0.33) | GPECSED07(0.33-0.66) | GPECSED07(0.66-1.97) | GPECSED07(1.97-3.28) | GPECSED07(3.28-6.56) | GPECSED07(6.56-9.1) |
| | | Start Depth | 12 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | End Depth | 14.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.1 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | GPECSED06(12.0-14.9)NSU | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | **0.0079 J** | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| delta-BHC | | 319-86-8 | 0.024 U | **0.03 J** | 0.082 UJ | **0.17 JN** | **0.17 JN** | **0.14 JN** | 0.039 UJ |
| alpha-chlordane | | 5103-71-9 | 0.024 U | 0.089 UJ | **0.18 J** | **0.29 J** | **0.51 J** | 0.055 UJ | 0.039 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.024 U | **0.25 J** | **0.26 J** | 0.077 UJ | **0.66 J** | 0.055 UJ | 0.039 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.024 U | 0.089 UJ | **0.16 JN** | **0.19 JN** | **0.32 JN** | **0.33 J** | 0.039 UJ |
| o,p'-DDE | | 3424-82-6 | 0.024 U | 0.089 UJ | 0.082 UJ | **0.081 JN** | **0.22 JN** | **0.12 J** | 0.039 UJ |
| 4,4'-DDE | | 72-55-9 | 0.024 U | **0.12 J** | **0.12 JN** | **0.18 JN** | **0.57 JN** | **0.15 JN** | 0.039 UJ |
| o,p'-DDT | | 789-02-6 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| 4,4'-DDT | | 50-29-3 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| Dieldrin | | 60-57-1 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | **0.33 J** | 0.055 UJ | 0.039 UJ |
| Endosulfan I | | 959-98-8 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| Endosulfan II | | 33213-65-9 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | **0.066 JN** | **0.28 JN** | 0.039 UJ |
| Endrin | | 72-20-8 | 0.024 U | **0.065 J** | **0.18 J** | **0.31 J** | **0.42 J** | 0.055 UJ | 0.039 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.066 JN** | 0.039 UJ |
| Endrin ketone | | 53494-70-5 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | **0.098 JN** | **0.35 J** | 0.039 UJ |
| Heptachlor | | 76-44-8 | 0.024 U | 0.089 UJ | 0.082 UJ | **0.14 JN** | **0.17 JN** | 0.055 UJ | 0.039 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.024 U | 0.089 UJ | 0.082 UJ | **0.11 JN** | **0.086 JN** | **0.11 J** | 0.039 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.17 J** | 0.039 UJ |
| Methoxychlor | | 72-43-5 | 0.048 U | 0.18 UJ | 0.16 UJ | 0.15 UJ | 0.11 UJ | 0.11 UJ | 0.079 UJ |
| Mirex | | 2385-85-5 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.12 JN** | 0.039 UJ |
| Mitotane | | 53-19-0 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | 0.055 UJ | 0.039 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.024 U | 0.089 UJ | 0.082 UJ | 0.077 UJ | 0.057 UJ | **0.11 JN** | 0.039 UJ |
| trans-Nonachlor | | 39765-80-5 | 0.97 U | 3.6 UJ | 3.3 UJ | 3.1 UJ | 2.3 UJ | 2.2 UJ | 1.6 UJ |
| Toxaphene | | 8001-35-2 | 0.97 U | 3.6 UJ | 3.3 UJ | 3.1 UJ | 2.3 UJ | 2.2 UJ | 1.6 UJ |
| Total Pesticides | | TPEST | **0.0079** | **0.465** | **0.9** | **1.651** | **3.83** | **2.526** | ND |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | **0.005** |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | **0.0081** |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | **0.0075** |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | **0.00084** |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | **0.011** |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | **0.0029 J** |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | **0.0043** |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | 0.0011 U |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | 0.00076 U |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | 0.00066 UJ |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | **0.003** |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | **0.0092 J** |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | 0.00066 U |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | **0.0041** |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | **0.0015** |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | **0.0023** |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | 0.16 U |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | **0.05974** |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 9.7 U | 36 UJ | 35 UJ | 33 UJ | 25 UJ | 22 UJ | 16 U |
| 2,4-D | | 94-75-7 | 0.097 U | 0.36 UJ | 0.35 UJ | 0.33 UJ | 0.25 UJ | 0.22 UJ | 0.16 U |
| 2,4-DB | | 94-82-6 | 0.097 U | 0.36 UJ | 0.35 UJ | 0.33 UJ | 0.25 UJ | 0.22 UJ | 0.16 U |
| Dicamba | | 1918-00-9 | 0.048 U | 0.18 UJ | 0.18 UJ | 0.16 UJ | 0.12 UJ | 0.11 UJ | 0.079 U |
| Dichloroprop | | 120-36-5 | 0.097 U | 0.36 UJ | 0.35 UJ | 0.33 UJ | 0.25 UJ | 0.22 UJ | 0.16 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.11 U | 0.4 UJ | 0.39 UJ | 0.37 UJ | 0.28 UJ | 0.25 UJ | 0.18 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED06 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 | GPEC-SED07 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSEDXX062110 | GPECSED07(0-0.33) | GPECSED07(0.33-0.66) | GPECSED07(0.66-1.97) | GPECSED07(1.97-3.28) | GPECSED07(3.28-6.56) | GPECSED07(6.56-9.1) |
| | | | Start Depth | 12 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | | End Depth | 14.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 9.1 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/21/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | | Parent Sample Code | GPECSED06(12.0-14.9)NSU | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Dinoseb | | 88-85-7 | | 0.015 U | 0.053 UJ | 0.053 UJ | 0.049 UJ | 0.037 UJ | 0.033 UJ | 0.024 U |
| Methylchlorophenoxyacetic acid | | 94-74-6 | | 9.7 U | 36 UJ | 35 UJ | 33 UJ | 25 UJ | 22 UJ | 16 U |
| Silvex | | 93-72-1 | | 0.024 U | 0.089 UJ | 0.088 UJ | 0.082 UJ | 0.062 UJ | 0.055 UJ | 0.039 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | | 0.024 U | 0.089 UJ | 0.088 UJ | 0.082 UJ | 0.062 UJ | **0.018 J** | 0.039 U |
| **Metals** | mg/kg | | | | | | | | | |
| Methyl mercury | | 22967-92-6 | | 0.00012 UJ | **0.0015 J** | **0.0005 J** | **0.00021 J** | **0.00013 J** | **0.0002 J** | **0.00032 J** |
| **Total Metals** | mg/kg | | | | | | | | | |
| Aluminum | | 7429-90-5 | | **2460** | **17600 J** | **16500 J** | **19800 J** | **14400 J** | **11400 J** | **14500 J** |
| Antimony | | 7440-36-0 | | **0.38 J** | **3.9 J** | **5.9 J** | **7 J** | **22.2 J** | **28.8 J** | **9.3 J** |
| Arsenic | | 7440-38-2 | | **2.5 J** | **39.4 J** | **79.7 J** | **111 J** | **199 J** | **276 J** | **220 J** |
| Barium | | 7440-39-3 | | **17.1 J** | **210 J** | **253 J** | **276 J** | **329 J** | **348 J** | **243 J** |
| Beryllium | | 7440-41-7 | | **0.12** | **0.93 J** | **1 J** | **1.1 J** | **1.2 J** | **0.9 J** | **0.71 J** |
| Cadmium | | 7440-43-9 | | **0.30 J** | **32.8 J** | **75.6 J** | **108 J** | **222 J** | **41.9 J** | **4 J** |
| Calcium | | 7440-70-2 | | **2130 J** | **14800 J** | **17600 J** | **18000 J** | **19800 J** | **19000 J** | **10300 J** |
| Chromium | | 7440-47-3 | | **8.1 J** | **300 J** | **623 J** | **891 J** | **1450 J** | **760 J** | **118** |
| Chromium (III) | | 16065-83-1 | | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | | **2.4 J** | **16.5 J** | **24.2 J** | **30.9 J** | **41 J** | **24.9 J** | **26.5** |
| Copper | | 7440-50-8 | | **38.4 J** | **2060 J** | **4280 J** | **5490 J** | **9460 J** | **7730 J** | **1340 J** |
| Iron | | 7439-89-6 | | **6260 J** | **38500 J** | **41300 J** | **46700 J** | **42300 J** | **37500 J** | **33200** |
| Lead | | 7439-92-1 | | **26.5 J** | **662 J** | **1060 J** | **1340 J** | **1640 J** | **1320 J** | **541 J** |
| Magnesium | | 7439-95-4 | | **1920 J** | **14200 J** | **13100 J** | **14100 J** | **8060 J** | **5940 J** | **8450 J** |
| Manganese | | 7439-96-5 | | **80.0 J** | **315 J** | **307 J** | **372 J** | **266 J** | **230 J** | **348 J** |
| Mercury | | 7439-97-6 | | **0.0807** | **1.81 J** | **2.72 J** | **6.91 J** | **5.06 J** | **5.44 J** | **3.23** |
| Nickel | | 7440-02-0 | | **12.1 J** | **295 J** | **698 J** | **935 J** | **2820 J** | **1750 J** | **376** |
| Potassium | | 7440-09-7 | | **361 J** | **4520 J** | **4050 J** | **4010 J** | **2830 J** | **2290 J** | **2820 J** |
| Selenium | | 7782-49-2 | | **0.21 J** | **4.8 J** | **7.9 J** | **9.9 J** | **11.3 J** | **15.6 J** | **36.5 J** |
| Silver | | 7440-22-4 | | **0.11 J** | **13.9 J** | **22.4 J** | **29.2 J** | **42.5 J** | **22.1 J** | **5.3 J** |
| Sodium | | 7440-23-5 | | **153 J** | **26700 J** | **24600 J** | **22600 J** | **13900 J** | **10100 J** | **2100 J** |
| Thallium | | 7440-28-0 | | **0.055 J** | **0.64 J** | **0.75 J** | **0.77 J** | **0.74 J** | **1.4 J** | **1.2 J** |
| Tin | | 7440-31-5 | | **2.1 J** | **56.3 J** | **80.4 J** | **105 J** | **160 J** | **139 J** | **40.2** |
| Vanadium | | 7440-62-2 | | **9.2 J** | **76 J** | **91.6 J** | **122 J** | **102 J** | **53.4 J** | **43.6 J** |
| Zinc | | 7440-66-6 | | **55.4 J** | **2350 J** | **4940 J** | **6960 J** | **12300 J** | **6070 J** | **999 J** |
| **Cyanides** | mg/kg | | | | | | | | | |
| Free Cyanide | | FREECN | | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | | 0.61 U | **3 J** | **4.7 J** | **5.3 J** | **6.8 J** | **7.4 J** | **1.9 J** |
| **Other** | mg/kg | | | | | | | | | |
| Ammonia | | 7664-41-7 | | 6.1 UJ | 111 UJ | **341 J** | **485 J** | **1100 J** | **575 J** | **341** |
| Black Carbon | | BC | | **6600 J** | **7830 J** | **8080 J** | **11400 J** | **18900 J** | **132000 J** | **20000 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | | **0.51 J** | **1.1 J** | **0.92 J** | **1.7 J** | **1 J** | **2.1 J** | **0.88 J** |
| pH (s.u.) | | pH | | **8.6 J** | **7.4 J** | **7.9 J** | **7.7 J** | **7.7 J** | **7.9 J** | **8 J** |
| Sulfide | | 18496-25-8 | | **392** | **6560 J** | **7280 J** | **12400 J** | **15000 J** | **8160 J** | **669 J** |
| Total Kjeldahl Nitrogen | | TKN | | 182 U | **6270 J** | **5780 J** | **8300 J** | **15500 J** | **6450 J** | **4480 J** |
| Total Nitrogen | | 7727-37-9 | | 50.0 U | **6270 J** | **5780 J** | **8300 J** | **15500 J** | **6450 J** | **4480 J** |
| Total Organic Carbon | | TOC | | **7710 J** | **98900 J** | **120000 J** | **134000 J** | **155000 J** | **281000 J** | **71300 J** |
| Total Phosphorous | | 7723-14-0 | | **2170 J** | **1220 J** | **1840 J** | **1410 J** | **5920 J** | **1210 J** | **773 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED07 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED07(9.1-14.0 NSU) | GPECSED08(0-0.33) | GPECSED08(0.33-0.66) | GPECSED08(0.66-1.97) | GPECSED08(1.97-3.28) | GPECSED08(3.28-6.56) | GPEC-XX-062310 |
| | | Start Depth | 9.1 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 |
| | | End Depth | 14 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | GPEC-SED-8(3.28-6.56) |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | **1.5 J** | NA | NA | NA | NA | **1.8 J** |
| Toluene | | 108-88-3 | NA | **3.6 J** | NA | NA | NA | NA | **0.26 J** |
| Ethylbenzene | | 100-41-4 | NA | **5.1 J** | NA | NA | NA | NA | **6.6 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | **8.2 J** | NA | NA | NA | NA | **12 J** |
| Total BTEX | | TBTEX | NA | **18.4** | NA | NA | NA | NA | **20.66** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | 6 UJ | NA | NA | NA | NA | 3 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Bromodichloromethane | | 75-27-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Bromoform | | 75-25-2 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Bromomethane | | 74-83-9 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 2-Butanone | | 78-93-3 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Carbon disulfide | | 75-15-0 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Chlorobenzene | | 108-90-7 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Chloroethane | | 75-00-3 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Chloroform | | 67-66-3 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Chloromethane | | 74-87-3 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Cyclohexane | | 110-82-7 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Dibromochloromethane | | 124-48-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Isopropyl benzene | | 98-82-8 | NA | **0.57 J** | NA | NA | NA | NA | **1 J** |
| Methyl acetate | | 79-20-9 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Methylcyclohexane | | 108-87-2 | NA | 1.5 UJ | NA | NA | NA | NA | **0.3 J** |
| Methylene chloride | | 75-09-2 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Styrene | | 100-42-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Tetrachloroethene | | 127-18-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Trichloroethene | | 79-01-6 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED07 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED07(9.1-14.0 NSU) | GPECSED08(0-0.33) | GPECSED08(0.33-0.66) | GPECSED08(0.66-1.97) | GPECSED08(1.97-3.28) | GPECSED08(3.28-6.56) | GPEC-XX-062310 |
| | | Start Depth | 9.1 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 |
| | | End Depth | 14 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | GPEC-SED-8(3.28-6.56) |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Vinyl chloride | | 75-01-4 | NA | 1.5 UJ | NA | NA | NA | NA | 0.76 UJ |
| Total VOCs | | TVOC | NA | **18.97** | NA | NA | NA | NA | **21.96** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **2.6** | **9.1 J** | **8.1 J** | **14 J** | **16 J** | **41 J** | **62 J** |
| Acenaphthylene | | 208-96-8 | **0.68 J** | **2.8 J** | **2 J** | **3.1 J** | **3.9 J** | **10 J** | **18 J** |
| Anthracene | | 120-12-7 | **2 J** | **5.4 J** | **4.3 J** | **6.2 J** | **8.7 J** | **38 J** | **57 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **0.62 J** | **5.6 J** | **5.9 J** | **8.6 J** | **8.7 J** | **16 J** | **17 J** |
| Fluoranthene | | 206-44-0 | **2.6** | **11 J** | **13 J** | **18 J** | **18 J** | **47 J** | **67 J** |
| Fluorene | | 86-73-7 | **1.9 J** | **5.6 J** | 7.9 UJ | 8.4 UJ | **3.4 J** | **33 J** | **42 J** |
| 2-Methylnaphthalene | | 91-57-6 | **5.3** | **21 J** | **1.7 J** | **2.4 J** | **4.3 J** | **110 J** | **180 J** |
| Naphthalene | | 91-20-3 | **11** | **79 J** | **4.7 J** | **6.5 J** | **11 J** | **410 J** | **560 J** |
| Phenanthrene | | 85-01-8 | **7.2** | **18 J** | 7.9 UJ | 8.4 UJ | **20 J** | **140 J** | **210 J** |
| Pyrene | | 129-00-0 | **4.7** | **25 J** | **26 J** | **41 J** | **41 J** | **98 J** | **130 J** |
| Benz[a]anthracene | | 56-55-3 | **2 J** | **7.3 J** | **12 J** | **17 J** | **15 J** | **38 J** | **47 J** |
| Benzo[a]pyrene | | 50-32-8 | **1.4 J** | **8.7 J** | **8.3 J** | **11 J** | **11 J** | **27 J** | **36 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **1.3 J** | **8.8 J** | **9.3 J** | **13 J** | **11 J** | **25 J** | **33 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Chrysene | | 218-01-9 | **1.4 J** | **7.9 J** | **9.2 J** | **16 J** | **14 J** | **34 J** | **51 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 2.1 U | 9.3 UJ | **2 J** | **3.5 J** | 6.8 UJ | 4.6 UJ | **4.7 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **0.48 J** | **5 J** | **5 J** | **5.6 J** | **5.4 J** | **9.9 J** | **13 J** |
| Total PAHs | | TPAH | **45.18** | **220.2** | **111.5** | **165.9** | **191.4** | **1076.9** | **1527.7** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | **12 J** | **19 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **1.9 J** | **79 J** | **160 J** | **360 J** | **410 J** | **120 J** | **100 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Caprolactam | | 105-60-2 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| Carbazole | | 86-74-8 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 4-Chloroaniline | | 106-47-8 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| 2-Chlorophenol | | 95-57-8 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Dibenzofuran | | 132-64-9 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Diethyl phthalate | | 84-66-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Dimethyl phthalate | | 131-11-3 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 1,4-Dioxane | | 123-91-1 | 21 UJ | 93 UJ | 78 UJ | 84 UJ | 67 UJ | 46 UJ | 49 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Hexachlorobutadiene | | 87-68-3 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED07 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED07(9.1-14.0 NSU) | GPECSED08(0-0.33) | GPECSED08(0.33-0.66) | GPECSED08(0.66-1.97) | GPECSED08(1.97-3.28) | GPECSED08(3.28-6.56) | GPEC-XX-062310 |
| | | Start Depth | 9.1 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 |
| | | End Depth | 14 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | GPEC-SED-8(3.28-6.56) |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 10 UJ | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Hexachloroethane | | 67-72-1 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Isophorone | | 78-59-1 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2-Methylphenol | | 95-48-7 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2-Nitroaniline | | 88-74-4 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| 3-Nitroaniline | | 99-09-2 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| 4-Nitroaniline | | 100-01-6 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| Nitrobenzene | | 98-95-3 | 21 U | 93 UJ | 78 UJ | 84 UJ | 67 UJ | 46 UJ | 49 UJ |
| 2-Nitrophenol | | 88-75-5 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 4-Nitrophenol | | 100-02-7 | 53 U | 240 UJ | 200 UJ | 210 UJ | 170 UJ | 120 UJ | 120 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Pentachlorophenol | | 87-86-5 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Phenol | | 108-95-2 | 2.1 U | 9.3 UJ | 7.9 UJ | 8.4 UJ | 6.8 UJ | 4.6 UJ | 4.9 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 10 U | 46 UJ | 39 UJ | 41 UJ | 33 UJ | 23 UJ | 24 UJ |
| Total SVOCs | | TSVOC | **47.08** | **299.2** | **271.5** | **525.9** | **601.4** | **1208.9** | **1646.7** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1248 | | 12672-29-6 | 0.25 U | **2.2 J** | **3.6 J** | **4.4 J** | **6.6 J** | **6.2 J** | **6.8 J** |
| Aroclor 1254 | | 11097-69-1 | 0.25 U | **3.6 J** | **5.1 J** | **5.8 J** | **8 J** | **9.6 J** | **9.9 J** |
| Aroclor 1260 | | 11096-82-5 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.25 U | 1.2 UJ | 0.96 UJ | 0.97 UJ | 0.86 UJ | 0.59 UJ | 0.6 UJ |
| Total PCBs | | 1336-36-3 | ND | **5.8** | **8.7** | **10.2** | **14.6** | **15.8** | **16.7** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | **7300 J** | NA | **15000 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | **2800 J** | NA | **4100 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | **5800 J** | NA | **13000 J** | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | **140 J** | NA | **230 J** | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | **5400 J** | NA | **7800 J** | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | **3600 J** | NA | **8000 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | **430 J** | NA | **960 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | 210 UJ | NA | **14 J** | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | **1000 J** | NA | **1400 J** | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | **910 J** | NA | **2000 J** | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | **60 J** | NA | **65 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | **140 J** | NA | **160 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | **120 J** | NA | **110 J** | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | **150 J** | NA | **230 J** | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | **4600 J** | NA | **9900 J** | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | **28000 J** | NA | **47000 J** | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | **2200 J** | NA | **4300 J** | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | **140 J** | NA | **250 J** | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | **410 J** | NA | **570 J** | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | **26 J** | NA | **55 J** | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | **230 J** | NA | **480 J** | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | **1700 J** | NA | **3700 J** | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | **290 J** | NA | **420 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | **99 J** | NA | **170 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | **21 J** | NA | **37 J** | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | **0.2 JN** | **0.12 JN** | **0.16 JN** |
| alpha-bhc | | 319-84-6 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| beta-BHC | | 319-85-7 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |

| | | Location Name | GPEC-SED07 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED07(9.1-14.0 NSU) | GPECSED08(0-0.33) | GPECSED08(0.33-0.66) | GPECSED08(0.66-1.97) | GPECSED08(1.97-3.28) | GPECSED08(3.28-6.56) | GPEC-XX-062310 |
| | | Start Depth | 9.1 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 |
| | | End Depth | 14 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | GPEC-SED-8(3.28-6.56) |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| delta-BHC | | 319-86-8 | 0.025 UJ | **0.12 J** | **0.081 J** | 0.097 UJ | **0.16 JN** | **0.17 J** | **0.14 JN** |
| alpha-chlordane | | 5103-71-9 | 0.025 UJ | 0.12 UJ | **0.11 J** | **0.2 J** | **0.35 J** | **0.42 J** | **0.47 J** |
| gamma-Chlordane | | 5103-74-2 | 0.025 UJ | **0.13 JN** | **0.25 J** | **0.28 J** | **0.52 J** | **0.49 J** | **0.54 J** |
| oxy-Chlordane | | 27304-13-8 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.025 UJ | 0.12 UJ | **0.11 JN** | **0.14 JN** | **0.15 JN** | **0.27 JN** | **0.28 JN** |
| o,p'-DDE | | 3424-82-6 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | **0.17 J** | **0.15 JN** | **0.19 JN** |
| 4,4'-DDE | | 72-55-9 | 0.025 UJ | **0.11 J** | **0.11 JN** | **0.14 JN** | **0.18 JN** | **0.55 JN** | **0.6 JN** |
| o,p'-DDT | | 789-02-6 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| 4,4'-DDT | | 50-29-3 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Dieldrin | | 60-57-1 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | **0.22 JN** | **0.32 J** |
| Endosulfan I | | 959-98-8 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Endosulfan II | | 33213-65-9 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Endrin | | 72-20-8 | 0.025 UJ | 0.12 UJ | **0.14 J** | **0.2 J** | **0.29 J** | **0.32 J** | **0.38 J** |
| Endrin aldehyde | | 7421-93-4 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| Endrin ketone | | 53494-70-5 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | **0.074 JN** | **0.078 JN** |
| Heptachlor | | 76-44-8 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | **0.17 JN** | **0.13 JN** | **0.17 J** |
| Heptachlor epoxide | | 1024-57-3 | 0.025 UJ | 0.12 UJ | **0.11 J** | 0.097 UJ | **0.11 JN** | **0.091 JN** | **0.099 JN** |
| Hexachlorobenzene | | 118-74-1 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | **0.063 J** |
| Methoxychlor | | 72-43-5 | 0.05 UJ | 0.24 UJ | 0.19 UJ | 0.19 UJ | 0.17 UJ | 0.12 UJ | 0.12 UJ |
| Mirex | | 2385-85-5 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | **0.09 J** |
| Mitotane | | 53-19-0 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.025 UJ | 0.12 UJ | 0.096 UJ | 0.097 UJ | 0.086 UJ | 0.058 UJ | 0.06 UJ |
| trans-Nonachlor | | 39765-80-5 | 1 UJ | 4.8 UJ | 3.8 UJ | 3.9 UJ | 3.4 UJ | 2.3 UJ | 2.4 UJ |
| Toxaphene | | 8001-35-2 | 1 UJ | 4.8 UJ | 3.8 UJ | 3.9 UJ | 3.4 UJ | 2.3 UJ | 2.4 UJ |
| Total Pesticides | | TPEST | ND | **0.36** | **0.911** | **0.96** | **2.3** | **3.005** | **3.58** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | **0.000065 J** | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | **0.0005** | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | **0.00065** | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.00069** | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | **0.0001 J** | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | **0.0013** | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | **0.000041 J** | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | **0.00012 J** | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | **0.00041** | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | **0.00096** | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | **0.00056** | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | **0.000029 J** | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | **0.00013 J** | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | **0.000033 J** | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | **0.0000064 J** | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | **0.001** | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | 0.0003 U | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | **0.0004** | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | **0.000088 J** | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | **0.00022 J** | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | 0.075 U | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | **0.0073024** | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 10 U | 48 UJ | 38 UJ | 42 UJ | 34 UJ | 25 UJ | 24 UJ |
| 2,4-D | | 94-75-7 | 0.1 U | 0.48 UJ | 0.38 UJ | 0.42 UJ | 0.34 UJ | 0.25 UJ | 0.24 UJ |
| 2,4-DB | | 94-82-6 | 0.1 U | 0.48 UJ | 0.38 UJ | 0.42 UJ | 0.34 UJ | 0.25 UJ | 0.24 UJ |
| Dicamba | | 1918-00-9 | 0.052 U | 0.24 UJ | 0.19 UJ | 0.21 UJ | 0.17 UJ | 0.12 UJ | 0.12 UJ |
| Dichloroprop | | 120-36-5 | 0.1 U | 0.48 UJ | 0.38 UJ | 0.42 UJ | 0.34 UJ | 0.25 UJ | 0.24 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.12 U | 0.54 UJ | 0.43 UJ | 0.47 UJ | 0.39 UJ | 0.28 UJ | 0.27 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED07 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 | GPEC-SED08 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED07(9.1-14.0 NSU) | GPECSED08(0-0.33) | GPECSED08(0.33-0.66) | GPECSED08(0.66-1.97) | GPECSED08(1.97-3.28) | GPECSED08(3.28-6.56) | GPEC-XX-062310 |
| | | Start Depth | 9.1 | 0 | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 |
| | | End Depth | 14 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 | 6/23/2010 |
| | | Parent Sample Code | | | | | | | GPEC-SED-8(3.28-6.56) |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.015 U | 0.072 UJ | 0.058 UJ | 0.063 UJ | 0.051 UJ | 0.037 UJ | 0.037 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 10 U | 48 UJ | 38 UJ | 42 UJ | 34 UJ | 25 UJ | 24 UJ |
| Silvex | | 93-72-1 | 0.026 U | 0.12 UJ | 0.096 UJ | 0.1 UJ | 0.086 UJ | 0.062 UJ | 0.061 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.026 U | 0.12 UJ | 0.096 UJ | 0.1 UJ | 0.086 UJ | 0.062 UJ | 0.061 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00013 UJ | 0.0006 UJ | 0.00049 UJ | 0.00052 UJ | R | R | **0.00034 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **2420** | **17200 J** | **14200 J** | **19800 J** | **19900 J** | **13600 J** | **13900 J** |
| Antimony | | 7440-36-0 | **0.4 J** | **3.7 J** | **3.9 J** | **7.2 J** | **8.2 J** | **27.7 J** | **29.3 J** |
| Arsenic | | 7440-38-2 | **6.9** | **48.7 J** | **58.8 J** | **115 J** | **128 J** | **217 J** | **244 J** |
| Barium | | 7440-39-3 | **11.4** | **212 J** | **197 J** | **293 J** | **280 J** | **326 J** | **304 J** |
| Beryllium | | 7440-41-7 | **0.12** | **0.95 J** | **0.81 J** | **1.2 J** | **1.2 J** | **1.1 J** | **1.2 J** |
| Cadmium | | 7440-43-9 | **0.32 J** | **37.3 J** | **54.5 J** | **110 J** | **140 J** | **198 J** | **165 J** |
| Calcium | | 7440-70-2 | **10700 J** | **14500 J** | **13700 J** | **18000 J** | **17900 J** | **18400 J** | **18500 J** |
| Chromium | | 7440-47-3 | **9.4** | **348 J** | **476 J** | **952 J** | **1150 J** | **1480 J** | **1520 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **2.9** | **18.3 J** | **18.7 J** | **32.1 J** | **34.7 J** | **43.4 J** | **44.9 J** |
| Copper | | 7440-50-8 | **49.3 J** | **2380 J** | **3010 J** | **5850 J** | **7750 J** | **10100 J** | **11500 J** |
| Iron | | 7439-89-6 | **6930** | **39700 J** | **32500 J** | **46700 J** | **46200 J** | **42700 J** | **42200 J** |
| Lead | | 7439-92-1 | **13.7** | **702 J** | **762 J** | **1330 J** | **1590 J** | **1550 J** | **1540 J** |
| Magnesium | | 7439-95-4 | **6580 J** | **14800 J** | **12200 J** | **15100 J** | **12800 J** | **7120 J** | **6930 J** |
| Manganese | | 7439-96-5 | **112** | **315 J** | **268 J** | **372 J** | **349 J** | **248 J** | **249 J** |
| Mercury | | 7439-97-6 | **0.179** | **0.529 J** | **3.03 J** | **0.164 J** | **4.65 J** | **6.85 J** | **9.14 J** |
| Nickel | | 7440-02-0 | **16.2** | **365 J** | **503 J** | **986 J** | **1130 J** | **3380 J** | **3210 J** |
| Potassium | | 7440-09-7 | **434** | **4700 J** | **3650 J** | **4260 J** | **3750 J** | **2530 J** | **2540 J** |
| Selenium | | 7782-49-2 | **0.44 J** | **6.9 J** | **7.4 J** | **12 J** | **14 J** | **13.8 J** | **13.7 J** |
| Silver | | 7440-22-4 | **0.18** | **15.9 J** | **18.1 J** | **31.7 J** | **38.1 J** | **42.4 J** | **39.3 J** |
| Sodium | | 7440-23-5 | **248** | **33900 J** | **26100 J** | **27200 J** | **19800 J** | **8910 J** | **7730 J** |
| Thallium | | 7440-28-0 | **0.071** | **0.73 J** | **0.64 J** | **0.83 J** | **0.84 J** | **0.74 J** | **0.75 J** |
| Tin | | 7440-31-5 | 0.32 U | **59.3 J** | **63.7 J** | **108 J** | **119 J** | **151 J** | **145 J** |
| Vanadium | | 7440-62-2 | **9.5** | **79.9 J** | **78.5 J** | **130 J** | **234 J** | **120 J** | **116 J** |
| Zinc | | 7440-66-6 | **48.8 J** | **2520 J** | **3340 J** | **7100 J** | **8680 J** | **12400 J** | **13300 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **0.12 J** | **2 J** | **2.4 J** | **4.2 J** | **6.9 J** | **9.6 J** | **16.8 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 32.2 U | 151 UJ | 122 UJ | **553 J** | **785 J** | **1050 J** | **561 J** |
| Black Carbon | | BC | **2100 J** | **7240 J** | **8330 J** | **7340 J** | **6560 J** | **13900 J** | **36400 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.25 J** | **1.2 J** | 4.9 UJ | 5.2 UJ | 4.3 UJ | **2.3 J** | **2.1 J** |
| pH (s.u.) | | pH | **8 J** | **7.4 J** | **7.6 J** | **7.7 J** | **7.6 J** | **7.8 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **87.6 J** | **10200 J** | **10600 J** | **8820 J** | **11000 J** | **16500 J** | **10900 J** |
| Total Kjeldahl Nitrogen | | TKN | **1520 J** | **7450 J** | **7290 J** | **10900 J** | **7720 J** | **9600 J** | **9260 J** |
| Total Nitrogen | | 7727-37-9 | **1520 J** | **7450 J** | **7290 J** | **10900 J** | **7720 J** | **9600 J** | **9260 J** |
| Total Organic Carbon | | TOC | **4430 J** | **96300 J** | **107000 J** | **108000 J** | **120000 J** | **150000 J** | **192000 J** |
| Total Phosphorous | | 7723-14-0 | **78.3 J** | **1250 J** | **1750 J** | **465 J** | **2090 J** | **1460 J** | **259 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED08 | GPEC-SED08 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED08(6.56-9.25) | GPECSED08(9.25-12.9 NSU) | GPECSED09(0-0.33) | GPECSED09(0.33-0.66) | GPECSED09(0.66-1.97) | GPECSED09(1.97-3.28) | GPECSED09(3.28-6.56) |
| | | Start Depth | 6.56 | 9.25 | 0 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | End Depth | 9.25 | 12.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **1.4 J** | NA | 1.3 UJ | NA | NA | NA | **12 J** |
| Toluene | | 108-88-3 | **0.63 J** | NA | 1.3 UJ | NA | NA | NA | **2.6 J** |
| Ethylbenzene | | 100-41-4 | **6.8 J** | NA | **0.66 J** | NA | NA | NA | **25 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **11 J** | NA | **0.67 J** | NA | NA | NA | **28 J** |
| Total BTEX | | TBTEX | **19.83** | NA | **1.33** | NA | NA | NA | **67.6** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 2.1 UJ | NA | 5.2 UJ | NA | NA | NA | 3.1 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Bromodichloromethane | | 75-27-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Bromoform | | 75-25-2 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Bromomethane | | 74-83-9 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 2-Butanone | | 78-93-3 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Carbon disulfide | | 75-15-0 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | **0.36 J** |
| Carbon tetrachloride | | 56-23-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Chlorobenzene | | 108-90-7 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Chloroethane | | 75-00-3 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Chloroform | | 67-66-3 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Chloromethane | | 74-87-3 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Cyclohexane | | 110-82-7 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | **0.4 J** |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Dibromochloromethane | | 124-48-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2-Dibromoethane | | 106-93-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | **0.18 J** |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | **0.13 J** |
| Dichlorodifluoromethane | | 75-71-8 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Isopropyl benzene | | 98-82-8 | **0.78 J** | NA | **0.25 J** | NA | NA | NA | **1.3 J** |
| Methyl acetate | | 79-20-9 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | **0.5 J** |
| Methyl tert-butyl ether | | 1634-04-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Methylcyclohexane | | 108-87-2 | **0.36 J** | NA | 1.3 UJ | NA | NA | NA | **1.5 J** |
| Methylene chloride | | 75-09-2 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Styrene | | 100-42-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Tetrachloroethene | | 127-18-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Trichloroethene | | 79-01-6 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Trichlorofluoromethane | | 75-69-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED08 | GPEC-SED08 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED08(6.56-9.25) | GPECSED08(9.25-12.9 NSU) | GPECSED09(0-0.33) | GPECSED09(0.33-0.66) | GPECSED09(0.66-1.97) | GPECSED09(1.97-3.28) | GPECSED09(3.28-6.56) |
| | | Start Depth | 6.56 | 9.25 | 0 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | End Depth | 9.25 | 12.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Vinyl chloride | | 75-01-4 | 0.52 UJ | NA | 1.3 UJ | NA | NA | NA | 0.77 UJ |
| Total VOCs | | TVOC | **20.97** | NA | **1.58** | NA | NA | NA | **71.97** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **58 J** | **8.7** | **2.1 J** | **4.6 J** | **7.2 J** | **20 J** | **150 J** |
| Acenaphthylene | | 208-96-8 | **7 J** | **1.9** | **2.8 J** | **3.3 J** | **4.1 J** | **10 J** | **34 J** |
| Anthracene | | 120-12-7 | **35 J** | **7.4** | **2 J** | **4 J** | **8.2 J** | **21 J** | **110 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **7.4 J** | **2.2 J** | **4.8 J** | **5.6 J** | **6.7 J** | **9.9 J** | **34 J** |
| Fluoranthene | | 206-44-0 | **34 J** | **8** | **10 J** | **14 J** | **20 J** | **33 J** | **130 J** |
| Fluorene | | 86-73-7 | **30 J** | **6** | 8 UJ | 7.6 UJ | **3.3 J** | **17 J** | **94 J** |
| 2-Methylnaphthalene | | 91-57-6 | **130 J** | **22** | **1.2 J** | **1.3 J** | **3 J** | **62 J** | **380 J** |
| Naphthalene | | 91-20-3 | **220 J** | **70** | **3.3 J** | **4.3 J** | **6.5 J** | **180 J** | **2400 J** |
| Phenanthrene | | 85-01-8 | **120 J** | **27** | 8 UJ | 7.6 U | 7.4 U | **78 J** | **400 J** |
| Pyrene | | 129-00-0 | **75 J** | **19** | **14 J** | **20 J** | **29 J** | **51 J** | **230 J** |
| Benz[a]anthracene | | 56-55-3 | **28 J** | **6.2** | **6.6 J** | **9.1 J** | **12 J** | **21 J** | **85 J** |
| Benzo[a]pyrene | | 50-32-8 | **16 J** | **5** | **5.8 J** | **8.2 J** | **8.4 J** | **15 J** | **67 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **14 J** | **4.6** | **4.2 J** | **9.2 J** | **10 J** | **16 J** | **59 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| Chrysene | | 218-01-9 | **27 J** | **5.8** | **5.8 J** | **9.5 J** | **14 J** | **21 J** | **96 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 3.1 UJ | 1.8 UJ | 8 UJ | **1.4 J** | 7.4 UJ | 9.9 UJ | **7.7 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **4.7 J** | **1.8 J** | **3.7 J** | **4.1 J** | **3.5 J** | **7.5 J** | **22 J** |
| Total PAHs | | TPAH | **806.1** | **195.6** | **66.3** | **98.6** | **135.9** | **562.4** | **4298.7** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **13 J** | **2.6 J** | 40 UJ | 37 UJ | 36 UJ | **7.6 J** | **30 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **7.5 J** | **14 J** | **67 J** | **140 J** | **660 J** | **130 J** | **100 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 15 UJ | 9 U | 40 UJ | 37 U | 36 UJ | 49 UJ | 48 UJ |
| Caprolactam | | 105-60-2 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| Carbazole | | 86-74-8 | **0.86 J** | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 4-Chloroaniline | | 106-47-8 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| 2-Chlorophenol | | 95-57-8 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Dibenzofuran | | 132-64-9 | **6 J** | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| Diethyl phthalate | | 84-66-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Dimethyl phthalate | | 131-11-3 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 1,4-Dioxane | | 123-91-1 | 31 UJ | 18 UJ | 80 UJ | 76 UJ | 73 UJ | 99 UJ | 96 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| Hexachlorobutadiene | | 87-68-3 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED08 | GPEC-SED08 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED08(6.56-9.25) | GPECSED08(9.25-12.9 NSU) | GPECSED09(0-0.33) | GPECSED09(0.33-0.66) | GPECSED09(0.66-1.97) | GPECSED09(1.97-3.28) | GPECSED09(3.28-6.56) |
| | | Start Depth | 6.56 | 9.25 | 0 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | End Depth | 9.25 | 12.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 15 UJ | 9 UJ | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Hexachloroethane | | 67-72-1 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Isophorone | | 78-59-1 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2-Methylphenol | | 95-48-7 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2-Nitroaniline | | 88-74-4 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| 3-Nitroaniline | | 99-09-2 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| 4-Nitroaniline | | 100-01-6 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| Nitrobenzene | | 98-95-3 | 31 UJ | 18 U | 80 UJ | 76 UJ | 73 UJ | 99 UJ | 96 UJ |
| 2-Nitrophenol | | 88-75-5 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 4-Nitrophenol | | 100-02-7 | 79 UJ | 46 U | 200 UJ | 190 UJ | 190 UJ | 250 UJ | 250 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 UJ | 9.9 UJ | 9.7 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Pentachlorophenol | | 87-86-5 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Phenol | | 108-95-2 | 3.1 UJ | 1.8 U | 8 UJ | 7.6 UJ | 7.4 U | 9.9 UJ | 9.7 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 15 UJ | 9 U | 40 UJ | 37 UJ | 36 UJ | 49 UJ | 48 UJ |
| Total SVOCs | | TSVOC | **833.46** | **212.2** | **133.3** | **238.6** | **795.9** | **700** | **4428.7** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1248 | | 12672-29-6 | **0.3 J** | 0.23 U | **4.1 J** | **18 J** | **27 J** | **52 J** | **25 J** |
| Aroclor 1254 | | 11097-69-1 | **0.27 J** | 0.23 U | **5.7 J** | **13 J** | **23 J** | **41 J** | **26 J** |
| Aroclor 1260 | | 11096-82-5 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.42 UJ | 0.23 U | 2.1 UJ | 0.96 UJ | 0.88 UJ | 0.62 UJ | 0.6 UJ |
| Total PCBs | | 1336-36-3 | **0.57** | ND | **9.8** | **31** | **50** | **93** | **51** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | **6200 J** | **13000 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | **2600 J** | **4300 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | **4900 J** | **10000 J** | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | **130 J** | **240 J** | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | **5300 J** | **8100 J** | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | **3400 J** | **7900 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | **400 J** | **880 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | 230 UJ | **17 J** | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | **1100 J** | **2100 J** | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | **620 J** | **1600 J** | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | **45 J** | **110 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | **130 J** | **210 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | **97 J** | **140 J** | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | **150 J** | **320 J** | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | **3200 J** | **6100 J** | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | **26000 J** | **38000 J** | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | **1600 J** | **3900 J** | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | **120 J** | **250 J** | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | **450 J** | **860 J** | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | **51 J** | **75 J** | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | **160 J** | **380 J** | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | **1300 J** | **3200 J** | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | **240 J** | **500 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | **85 J** | **200 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | **13 J** | **30 J** | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.042 UJ | 0.023 UJ | 0.1 UJ | **0.073 J** | **0.17 J** | **0.26 JN** | 0.3 UJ |
| alpha-bhc | | 319-84-6 | 0.042 UJ | 0.023 UJ | **0.056 J** | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| beta-BHC | | 319-85-7 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | **0.16 J** | 0.062 UJ | 0.3 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED08 | GPEC-SED08 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED08(6.56-9.25) | GPECSED08(9.25-12.9 NSU) | GPECSED09(0-0.33) | GPECSED09(0.33-0.66) | GPECSED09(0.66-1.97) | GPECSED09(1.97-3.28) | GPECSED09(3.28-6.56) |
| | | Start Depth | 6.56 | 9.25 | 0 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | End Depth | 9.25 | 12.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| delta-BHC | | 319-86-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | **0.34 J** | 0.3 UJ |
| alpha-chlordane | | 5103-71-9 | 0.042 UJ | 0.023 UJ | 0.1 UJ | **0.13 J** | **0.19 J** | **0.59 J** | 0.3 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | **0.74 J** | 0.3 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | **0.13 JN** | **0.18 JN** | **0.38 JN** | **0.73 J** |
| o,p'-DDE | | 3424-82-6 | 0.042 UJ | 0.023 UJ | 0.1 UJ | **0.16 JN** | **0.26 J** | **0.9 J** | **0.51 J** |
| 4,4'-DDE | | 72-55-9 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | **0.12 JN** | **0.67 J** | **0.75 JN** |
| o,p'-DDT | | 789-02-6 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| 4,4'-DDT | | 50-29-3 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | **0.45 J** | **0.74 J** | **0.85 J** |
| Dieldrin | | 60-57-1 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | **0.12 JN** | **0.36 JN** | **0.4 J** |
| Endosulfan I | | 959-98-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Endosulfan II | | 33213-65-9 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Endrin | | 72-20-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 U | 0.088 UJ | 0.062 UJ | **0.44 J** |
| Endrin aldehyde | | 7421-93-4 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Endrin ketone | | 53494-70-5 | 0.042 UJ | 0.023 UJ | 0.1 UJ | **0.13 J** | **0.13 JN** | **0.12 JN** | **0.84 JN** |
| Heptachlor | | 76-44-8 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | **0.19 JN** | 0.3 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | **0.54 J** | 0.3 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| Methoxychlor | | 72-43-5 | 0.084 UJ | 0.046 UJ | 0.21 UJ | 0.19 UJ | **0.21 JN** | **0.39 JN** | **2.5 JN** |
| Mirex | | 2385-85-5 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | **0.42 J** |
| Mitotane | | 53-19-0 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | 0.062 UJ | 0.3 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.042 UJ | 0.023 UJ | 0.1 UJ | 0.096 UJ | 0.088 UJ | **0.076 JN** | 0.3 UJ |
| trans-Nonachlor | | 39765-80-5 | 1.7 UJ | 0.92 UJ | 4.2 UJ | 3.9 UJ | 3.5 UJ | 2.5 UJ | 12 UJ |
| Toxaphene | | 8001-35-2 | 1.7 UJ | 0.92 UJ | 4.2 UJ | 3.9 UJ | 3.5 UJ | 2.5 UJ | 12 UJ |
| Total Pesticides | | TPEST | ND | ND | **0.056** | **0.623** | **1.99** | **6.296** | **7.44** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | **0.000077 J** | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | **0.0001 J** | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | **0.00011 J** | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | **0.00006 J** | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | **0.000022 J** | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | **0.00033 J** | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | **0.000052 J** | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | **0.0001 J** | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | **0.00012 J** | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | **0.0012** | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | **0.00067** | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | **0.000031 J** | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | **0.00015 J** | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | **0.000037 J** | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | **0.0000096 J** | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | **0.0012** | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | 0.00034 U | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | **0.00003 J** | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | **0.00002 J** | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | **0.000053 J** | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | 0.084 U | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | **0.0043716** | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 16 UJ | 9.6 U | 42 UJ | **39** | 37 UJ | 25 UJ | 25 UJ |
| 2,4-D | | 94-75-7 | 0.16 UJ | 0.096 U | 0.42 UJ | 0.39 UJ | 0.37 UJ | 0.25 UJ | 0.25 UJ |
| 2,4-DB | | 94-82-6 | 0.16 UJ | 0.096 U | 0.42 UJ | 0.39 UJ | 0.37 UJ | 0.25 UJ | 0.25 UJ |
| Dicamba | | 1918-00-9 | 0.079 UJ | 0.048 U | 0.21 UJ | 0.2 UJ | 0.18 UJ | 0.12 UJ | 0.12 UJ |
| Dichloroprop | | 120-36-5 | 0.16 UJ | 0.096 U | 0.42 UJ | 0.39 UJ | 0.37 UJ | 0.25 UJ | 0.25 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.18 UJ | 0.11 U | 0.47 UJ | 0.44 UJ | 0.41 UJ | 0.28 UJ | 0.28 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED08 | GPEC-SED08 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED08(6.56-9.25) | GPECSED08(9.25-12.9 NSU) | GPECSED09(0-0.33) | GPECSED09(0.33-0.66) | GPECSED09(0.66-1.97) | GPECSED09(1.97-3.28) | GPECSED09(3.28-6.56) |
| | | Start Depth | 6.56 | 9.25 | 0 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | End Depth | 9.25 | 12.9 | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/23/2010 | 6/23/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/21/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.024 UJ | 0.014 U | 0.062 UJ | 0.059 UJ | 0.055 UJ | 0.037 UJ | 0.037 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 16 UJ | 9.6 U | 42 UJ | 39 UJ | 37 UJ | 25 UJ | **32 J** |
| Silvex | | 93-72-1 | 0.039 UJ | 0.024 U | 0.1 UJ | 0.098 UJ | 0.092 UJ | 0.062 UJ | 0.061 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.039 UJ | 0.024 U | 0.1 UJ | 0.098 UJ | 0.092 UJ | 0.062 UJ | 0.061 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00021 UJ | 0.00012 UJ | 0.00052 UJ | 0.00049 UJ | 0.0046 UJ | 0.00031 UJ | 0.00031 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **16000 J** | **2210** | **14500 J** | **10900 J** | **12800 J** | **13600 J** | **13400 J** |
| Antimony | | 7440-36-0 | **7.1 J** | 0.12 UJ | **3.5 J** | **3.7 J** | **5.1 J** | **29.0 J** | **24.6 J** |
| Arsenic | | 7440-38-2 | **177 J** | **0.78 J** | **40.2 J** | **39.7 J** | **64.3 J** | **148 J** | **189 J** |
| Barium | | 7440-39-3 | **209 J** | **9 J** | **180 J** | **152 J** | **164 J** | **323 J** | **287 J** |
| Beryllium | | 7440-41-7 | **0.83 J** | **0.11** | **0.70 J** | **0.55 J** | **0.69 J** | **0.93 J** | **1.4 J** |
| Cadmium | | 7440-43-9 | **10.4 J** | **0.055 J** | **39.5 J** | **39.8 J** | **67.7 J** | **250 J** | **91.1 J** |
| Calcium | | 7440-70-2 | **8290 J** | **12300 J** | **12300 J** | **9150 J** | **9870 J** | **11900 J** | **16900 J** |
| Chromium | | 7440-47-3 | **174 J** | **6.7** | **319 J** | **314 J** | **517 J** | **1410 J** | **998 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **22.9 J** | **2.9** | **14.0 J** | **12.0 J** | **16.4 J** | **47.2 J** | **29.9 J** |
| Copper | | 7440-50-8 | **1470 J** | **8.6 J** | **2060 J** | **2020 J** | **3060 J** | **9640 J** | **14000 J** |
| Iron | | 7439-89-6 | **33500 J** | **6440** | **31900 J** | **24100 J** | **28000 J** | **32400 J** | **32400 J** |
| Lead | | 7439-92-1 | **478 J** | **2.8 J** | **708 J** | **626 J** | **911 J** | **1530 J** | **1830 J** |
| Magnesium | | 7439-95-4 | **8590 J** | **6160** | **12400 J** | **9310 J** | **9600 J** | **6210 J** | **6270 J** |
| Manganese | | 7439-96-5 | **349 J** | **121 J** | **225 J** | **171 J** | **197 J** | **203 J** | **200 J** |
| Mercury | | 7439-97-6 | **3.81 J** | **0.0047** | **3.25 J** | **2.02 J** | **1.53 J** | **5.92 J** | **3.05 J** |
| Nickel | | 7440-02-0 | **348 J** | **6.6** | **318 J** | **314 J** | **541 J** | **2520 J** | **2140 J** |
| Potassium | | 7440-09-7 | **3120 J** | **515** | **3480 J** | **2570 J** | **2540 J** | **2110 J** | **2100 J** |
| Selenium | | 7782-49-2 | **39.2 J** | **0.55 J** | **4.5 J** | **3.9 J** | **5.6 J** | **8.2 J** | **9.4 J** |
| Silver | | 7440-22-4 | **6.5 J** | **0.015 J** | **13.9 J** | **13.0 J** | **18.8 J** | **38.7 J** | **30.2 J** |
| Sodium | | 7440-23-5 | **1940 J** | **106 J** | **22800 J** | **19800 J** | **16800 J** | **6750 J** | **5560 J** |
| Thallium | | 7440-28-0 | **1 J** | 0.060 UJ | **0.67 J** | **0.49 J** | **0.52 J** | **0.61 J** | **0.79 J** |
| Tin | | 7440-31-5 | **31.5 J** | 0.30 UJ | **56.3 J** | **46.2 J** | **66.9 J** | **125 J** | **166 J** |
| Vanadium | | 7440-62-2 | **50.4 J** | **10.6 J** | **63.7 J** | **52.0 J** | **75.2 J** | **94.9 J** | **139 J** |
| Zinc | | 7440-66-6 | **1160 J** | **14.5 J** | **2450 J** | **2360 J** | **3730 J** | **17700 J** | **11100 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **2.7 J** | 0.60 UJ | **2.1 J** | **2.9 J** | **5.6 J** | **11.6 J** | **11.3 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **325 J** | 30.0 U | **455 J** | **498 J** | **967 J** | **1460 J** | **1310 J** |
| Black Carbon | | BC | **7940 J** | **10500 J** | **5840 J** | **5940 J** | **7230 J** | **13400 J** | **19900 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.7 J** | 1.2 U | **1.7 J** | **1.5 J** | **1.3 J** | **3.6 J** | **3.0 J** |
| pH (s.u.) | | pH | **8 J** | **8.9 J** | **7.5 J** | **7.4 J** | **7.4 J** | **7.6 J** | **7.6 J** |
| Sulfide | | 18496-25-8 | **2870 J** | **57.6 J** | **9110 J** | **11000 J** | **15400 J** | **18200 J** | **12700 J** |
| Total Kjeldahl Nitrogen | | TKN | **4930 J** | 180 UJ | 778 UJ | 738 UJ | 689 UJ | **9960 J** | **9270 J** |
| Total Nitrogen | | 7727-37-9 | **4930 J** | 50.0 UJ | 50.0 UJ | 50.0 UJ | 50.0 UJ | **9960 J** | **9270 J** |
| Total Organic Carbon | | TOC | **59700 J** | **8290 J** | **89000 J** | **86300 J** | **119000 J** | **135000 J** | **178000 J** |
| Total Phosphorous | | 7723-14-0 | **3660 J** | **249 J** | **404 J** | **441 J** | **4050 J** | **6060 J** | **5040 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED09(6.56-9.84) | GPECSED09(9.84-11.50) | GPECSED09(11.5-14.3)NSU | GPECSED10(0-0.33) | GPECSED10(0.33-0.66) | GPECSED10(0.66-1.97) | GPECSED10(1.97-3.28) |
| | | Start Depth | 6.56 | 9.84 | 11.5 | 0 | 0.33 | 0.66 | 1.97 |
| | | End Depth | 9.84 | 11.5 | 14.3 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **5.3 J** | **9.1** | **1.4 J** | **0.0052 J** | NA | **0.72 J** | NA |
| Toluene | | 108-88-3 | **4.1 J** | **1.6 J** | **0.62 J** | 0.029 UJ | NA | **0.99** | NA |
| Ethylbenzene | | 100-41-4 | **7.2 J** | **71** | **39 J** | 0.029 UJ | NA | **3.8** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **8.2 J** | **64** | **31 J** | 0.087 UJ | NA | **8.1** | NA |
| Total BTEX | | TBTEX | **24.8** | **145.7** | **72.02** | **0.0052** | NA | **13.61** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | **1.2 J** | 13 UJ | 1.4 UJ | 0.12 UJ | NA | 3.1 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Bromodichloromethane | | 75-27-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Bromoform | | 75-25-2 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Bromomethane | | 74-83-9 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 2-Butanone | | 78-93-3 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Carbon disulfide | | 75-15-0 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Chlorobenzene | | 108-90-7 | **0.099 J** | 3.2 U | 0.36 UJ | 0.029 UJ | NA | **0.16 J** | NA |
| Chloroethane | | 75-00-3 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Chloroform | | 67-66-3 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Chloromethane | | 74-87-3 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Cyclohexane | | 110-82-7 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | **0.1 J** | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Dibromochloromethane | | 124-48-1 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | 0.76 UJ | 3.2 UJ | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Isopropyl benzene | | 98-82-8 | **0.46 J** | **7.8** | **4.5 J** | **0.012 J** | NA | **0.72 J** | NA |
| Methyl acetate | | 79-20-9 | 0.76 UJ | 3.2 UJ | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.76 UJ | 3.2 UJ | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Methylcyclohexane | | 108-87-2 | **0.52 J** | **0.56 J** | **0.083 J** | 0.029 UJ | NA | **0.47 J** | NA |
| Methylene chloride | | 75-09-2 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Styrene | | 100-42-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Tetrachloroethene | | 127-18-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Trichloroethene | | 79-01-6 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED09(6.56-9.84) | GPECSED09(9.84-11.50) | GPECSED09(11.5-14.3)NSU | GPECSED10(0-0.33) | GPECSED10(0.33-0.66) | GPECSED10(0.66-1.97) | GPECSED10(1.97-3.28) |
| | | Start Depth | 6.56 | 9.84 | 11.5 | 0 | 0.33 | 0.66 | 1.97 |
| | | End Depth | 9.84 | 11.5 | 14.3 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.76 UJ | 3.2 UJ | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Vinyl chloride | | 75-01-4 | 0.76 UJ | 3.2 U | 0.36 UJ | 0.029 UJ | NA | 0.77 UJ | NA |
| Total VOCs | | TVOC | **27.079** | **154.06** | **76.603** | **0.0172** | NA | **15.06** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **220 J** | **510** | **340** | **3 J** | **200 J** | **170 J** | **85 J** |
| Acenaphthylene | | 208-96-8 | **45 J** | **75** | **40** | **2.1 J** | **43 J** | **33 J** | **12 J** |
| Anthracene | | 120-12-7 | **120 J** | **250** | **160** | **3.3 J** | **140 J** | **130 J** | **62 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **30 J** | **68** | **29** | **4.2 J** | **41 J** | **31 J** | **20 J** |
| Fluoranthene | | 206-44-0 | **120 J** | **240** | **140** | **11 J** | **160 J** | **140 J** | **93 J** |
| Fluorene | | 86-73-7 | **130 J** | **250** | **140** | **1.7 J** | **140 J** | **110 J** | **52 J** |
| 2-Methylnaphthalene | | 91-57-6 | **710 J** | **1400** | **860** | **3.9 J** | **570 J** | **510 J** | **170 J** |
| Naphthalene | | 91-20-3 | **3400 J** | **4300** | **1800** | **7.5 J** | **910 J** | **1300 J** | **870 J** |
| Phenanthrene | | 85-01-8 | **440 J** | **840** | **540** | **7.1 J** | **560 J** | **430 J** | **210 J** |
| Pyrene | | 129-00-0 | **260 J** | **490** | **300** | **16 J** | **310 J** | **270 J** | **160 J** |
| Benz[a]anthracene | | 56-55-3 | **82 J** | **170** | **91** | **8 J** | **100 J** | **84 J** | **69 J** |
| Benzo[a]pyrene | | 50-32-8 | **63 J** | **140** | **71** | **5.9 J** | **78 J** | **66 J** | **42 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **57 J** | **120** | **58** | **8.5 J** | **74 J** | **61 J** | **44 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Chrysene | | 218-01-9 | **83 J** | **180** | **84** | **7.9 J** | **110 J** | **77 J** | **59 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | **5.2 J** | **9.9 J** | **7.7 J** | 9 UJ | **11 J** | **6 J** | **6.6 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **18 J** | **24 J** | **20** | **3.4 J** | **28 J** | **21 J** | **14 J** |
| Total PAHs | | TPAH | **5783.2** | **9066.9** | **4680.7** | **93.5** | **3475** | **3439** | **1968.6** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **61 J** | **110 J** | **75** | 44 UJ | **55 J** | **46 J** | **17 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **77 J** | 410 U | 110 U | **74 J** | **59 J** | 93 UJ | 45 UJ |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Caprolactam | | 105-60-2 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| Carbazole | | 86-74-8 | **7.6 J** | **11 J** | **2.9 J** | 9 UJ | 11 UJ | 9.3 UJ | **2.3 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 4-Chloroaniline | | 106-47-8 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| 2-Chlorophenol | | 95-57-8 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Dibenzofuran | | 132-64-9 | **28 J** | **41 J** | **28 J** | 44 UJ | 52 UJ | 46 UJ | **15 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Diethyl phthalate | | 84-66-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Dimethyl phthalate | | 131-11-3 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 1,4-Dioxane | | 123-91-1 | 230 UJ | 410 U | 110 U | 89 UJ | 110 UJ | 93 UJ | 45 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Hexachlorobutadiene | | 87-68-3 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED09(6.56-9.84) | GPECSED09(9.84-11.50) | GPECSED09(11.5-14.3)NSU | GPECSED10(0-0.33) | GPECSED10(0.33-0.66) | GPECSED10(0.66-1.97) | GPECSED10(1.97-3.28) |
| | | Start Depth | 6.56 | 9.84 | 11.5 | 0 | 0.33 | 0.66 | 1.97 |
| | | End Depth | 9.84 | 11.5 | 14.3 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Hexachloroethane | | 67-72-1 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Isophorone | | 78-59-1 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2-Methylphenol | | 95-48-7 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2-Nitroaniline | | 88-74-4 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| 3-Nitroaniline | | 99-09-2 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| 4-Nitroaniline | | 100-01-6 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| Nitrobenzene | | 98-95-3 | 230 UJ | 410 U | 110 U | 89 UJ | 110 UJ | 93 UJ | 45 UJ |
| 2-Nitrophenol | | 88-75-5 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 4-Nitrophenol | | 100-02-7 | 590 UJ | 1000 U | 290 U | 230 UJ | 270 UJ | 240 UJ | 120 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Pentachlorophenol | | 87-86-5 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Phenol | | 108-95-2 | 23 UJ | 41 U | 11 U | 9 UJ | 11 UJ | 9.3 UJ | 4.5 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 120 UJ | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 120 U | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 120 U | 200 U | 56 U | 44 UJ | 52 UJ | 46 UJ | 22 UJ |
| Total SVOCs | | TSVOC | **5956.8** | **9228.9** | **4786.6** | **167.5** | **3589** | **3485** | **2002.9** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1248 | | 12672-29-6 | **34 J** | **1.2 J** | **1.5 J** | **1.7 J** | **3.6 J** | **1.9 J** | **0.16 J** |
| Aroclor 1254 | | 11097-69-1 | **15 J** | **0.57 J** | **0.74 J** | **2.6 J** | **6.4 J** | **8.6 J** | **0.35 J** |
| Aroclor 1260 | | 11096-82-5 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.59 UJ | 0.25 U | 0.28 U | 1.1 UJ | 0.68 UJ | 0.59 UJ | 0.56 UJ |
| Total PCBs | | 1336-36-3 | **49** | **1.77** | **2.24** | **4.3** | **10** | **10.5** | **0.51** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.059 UJ | 0.025 UJ | 0.028 UJ | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| alpha-bhc | | 319-84-6 | 0.059 UJ | **0.021 J** | **0.012 J** | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| beta-BHC | | 319-85-7 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | **0.23 J** | **0.58 J** | 0.056 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED09(6.56-9.84) | GPECSED09(9.84-11.50) | GPECSED09(11.5-14.3)NSU | GPECSED10(0-0.33) | GPECSED10(0.33-0.66) | GPECSED10(0.66-1.97) | GPECSED10(1.97-3.28) |
| | | Start Depth | 6.56 | 9.84 | 11.5 | 0 | 0.33 | 0.66 | 1.97 |
| | | End Depth | 9.84 | 11.5 | 14.3 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| delta-BHC | | 319-86-8 | 0.059 UJ | 0.025 U | **0.011 J** | **0.059 J** | **0.082 J** | 0.059 UJ | 0.056 UJ |
| alpha-chlordane | | 5103-71-9 | **0.13 JN** | 0.025 U | 0.028 U | 0.11 UJ | **0.18 J** | 0.059 UJ | 0.056 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.14 JN** | 0.025 U | 0.028 U | **0.13 J** | 0.068 UJ | **0.12 J** | 0.056 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.059 U | 0.025 U | 0.028 U | 0.11 UJ | **0.088 JN** | 0.059 UJ | 0.056 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.3 JN** | **0.077** | 0.028 U | 0.11 UJ | **0.22 JN** | 0.059 UJ | 0.056 UJ |
| o,p'-DDE | | 3424-82-6 | **0.36 JN** | **0.046** | **0.0075 J** | 0.11 UJ | **0.11 JN** | **0.11 JN** | 0.056 UJ |
| 4,4'-DDE | | 72-55-9 | **0.32 JN** | 0.025 U | 0.028 U | **0.098 J** | **0.37 JN** | 0.059 UJ | 0.056 UJ |
| o,p'-DDT | | 789-02-6 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| 4,4'-DDT | | 50-29-3 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| Dieldrin | | 60-57-1 | **0.14 J** | 0.025 U | 0.028 U | 0.11 UJ | **0.14 JN** | 0.059 UJ | 0.056 UJ |
| Endosulfan I | | 959-98-8 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | **0.046 J** | 0.059 UJ | 0.056 UJ |
| Endosulfan II | | 33213-65-9 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | **0.11 JN** | 0.059 UJ | 0.056 UJ |
| Endrin | | 72-20-8 | **0.22 J** | **0.024 J** | 0.028 U | **0.047 J** | **0.25 J** | **0.43 J** | 0.056 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| Endrin ketone | | 53494-70-5 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | **0.098 JN** | **0.073 JN** | 0.056 UJ |
| Heptachlor | | 76-44-8 | **0.16 J** | 0.025 U | 0.028 U | 0.11 UJ | **0.077 JN** | 0.059 UJ | 0.056 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | **0.077 JN** | **0.17 JN** | 0.056 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| Methoxychlor | | 72-43-5 | **0.4 J** | 0.051 U | 0.057 U | 0.21 UJ | **0.4 JN** | 0.12 UJ | 0.11 UJ |
| Mirex | | 2385-85-5 | 0.059 UJ | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| Mitotane | | 53-19-0 | **0.41 JN** | **0.035 J** | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| cis-Nonachlor | | 5103-73-1 | **0.12 JN** | 0.025 U | 0.028 U | 0.11 UJ | 0.068 UJ | 0.059 UJ | 0.056 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.4 UJ | 1 U | 1.1 U | 4.3 UJ | 2.7 UJ | 2.4 UJ | 2.3 UJ |
| Toxaphene | | 8001-35-2 | 2.4 UJ | 1 U | 1.1 U | 4.3 UJ | 2.7 UJ | 2.4 UJ | 2.3 UJ |
| Total Pesticides | | TPEST | **2.7** | **0.203** | **0.0305** | **0.334** | **2.478** | **1.483** | ND |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 24 UJ | 10 UJ | 11 U | 46 UJ | 26 UJ | 25 UJ | 23 UJ |
| 2,4-D | | 94-75-7 | 0.24 UJ | 0.1 UJ | 0.11 U | 0.46 UJ | 0.26 UJ | 0.25 UJ | 0.23 UJ |
| 2,4-DB | | 94-82-6 | 0.24 UJ | 0.1 UJ | 0.11 U | 0.46 UJ | 0.26 UJ | 0.25 UJ | 0.23 UJ |
| Dicamba | | 1918-00-9 | 0.12 UJ | 0.051 UJ | 0.056 U | 0.23 UJ | 0.13 UJ | 0.12 UJ | 0.11 UJ |
| Dichloroprop | | 120-36-5 | 0.24 UJ | 0.1 UJ | 0.11 U | 0.46 UJ | 0.26 UJ | 0.25 UJ | 0.23 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.27 UJ | 0.11 UJ | 0.13 U | 0.52 UJ | 0.3 UJ | 0.28 UJ | 0.25 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED09 | GPEC-SED09 | GPEC-SED09 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED09(6.56-9.84) | GPECSED09(9.84-11.50) | GPECSED09(11.5-14.3)NSU | GPECSED10(0-0.33) | GPECSED10(0.33-0.66) | GPECSED10(0.66-1.97) | GPECSED10(1.97-3.28) |
| | | Start Depth | 6.56 | 9.84 | 11.5 | 0 | 0.33 | 0.66 | 1.97 |
| | | End Depth | 9.84 | 11.5 | 14.3 | 0.33 | 0.66 | 1.97 | 3.28 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/21/2010 | 6/21/2010 | 6/21/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.036 UJ | 0.015 UJ | 0.017 U | 0.07 UJ | 0.039 UJ | 0.037 UJ | 0.034 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 24 UJ | 10 UJ | 11 U | 46 UJ | 26 UJ | 25 UJ | 23 UJ |
| Silvex | | 93-72-1 | 0.061 UJ | 0.025 UJ | 0.028 U | 0.12 UJ | 0.066 UJ | 0.061 UJ | 0.056 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.061 UJ | 0.025 UJ | 0.028 U | 0.12 UJ | 0.066 UJ | 0.061 UJ | 0.056 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.0003 UJ | 0.00013 UJ | 0.00014 UJ | **0.0019 J** | **0.00014 J** | 0.00031 UJ | **0.00019 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **15200 J** | **3880** | **2930** | **17000 J** | **12400 J** | **11600 J** | **11900 J** |
| Antimony | | 7440-36-0 | **38.7 J** | **1.9 J** | **0.56 J** | **4.6 J** | **21.2 J** | **23.9 J** | **36.2 J** |
| Arsenic | | 7440-38-2 | **193 J** | **19.6** | **7** | **47.1 J** | **165 J** | **290 J** | **449 J** |
| Barium | | 7440-39-3 | **344 J** | **53.4 J** | **22.5 J** | **227 J** | **297 J** | **508 J** | **621 J** |
| Beryllium | | 7440-41-7 | **1.1 J** | **0.22** | **0.14** | **0.98 J** | **1 J** | **1 J** | **0.9 J** |
| Cadmium | | 7440-43-9 | **228 J** | **3.5 J** | **0.75 J** | **36.4 J** | **230 J** | **23.2 J** | **21.9 J** |
| Calcium | | 7440-70-2 | **16100 J** | **5030 J** | **6870 J** | **16800 J** | **14700 J** | **9600 J** | **8940 J** |
| Chromium | | 7440-47-3 | **1510 J** | **33.1 J** | **36.7 J** | **310 J** | **1410 J** | **336 J** | **257 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **43.5 J** | **4.6 J** | **3.6 J** | **18.3 J** | **42.4 J** | **19.4 J** | **22.3 J** |
| Copper | | 7440-50-8 | **9110 J** | **356** | **84.1** | **2330 J** | **7950 J** | **3500 J** | **4600 J** |
| Iron | | 7439-89-6 | **39600 J** | **9990 J** | **7860 J** | **39900 J** | **38600 J** | **35500 J** | **41900 J** |
| Lead | | 7439-92-1 | **1800 J** | **168 J** | **32.6 J** | **778 J** | **1510 J** | **1460 J** | **1470 J** |
| Magnesium | | 7439-95-4 | **7190 J** | **3490** | **4850** | **12600 J** | **7510 J** | **5950 J** | **5740 J** |
| Manganese | | 7439-96-5 | **252 J** | **123 J** | **121 J** | **293 J** | **224 J** | **302 J** | **213 J** |
| Mercury | | 7439-97-6 | **2.39 J** | **0.295** | **0.138** | **2.04 J** | **6.6 J** | **8.24 J** | **0.628 J** |
| Nickel | | 7440-02-0 | **3590 J** | **81.3 J** | **30.8 J** | **358 J** | **2760 J** | **773 J** | **1320 J** |
| Potassium | | 7440-09-7 | **2290 J** | **768 J** | **487 J** | **3930 J** | **2840 J** | **2520 J** | **2450 J** |
| Selenium | | 7782-49-2 | **10.1 J** | **1.3** | **0.48** | **5.5 J** | **10 J** | **24.1 J** | **25.2 J** |
| Silver | | 7440-22-4 | **44.3 J** | **0.99 J** | **0.18 J** | **16.7 J** | **37 J** | **22 J** | **22.5 J** |
| Sodium | | 7440-23-5 | **5680 J** | **360 J** | **227 J** | **16700 J** | **18200 J** | **12400 J** | **9760 J** |
| Thallium | | 7440-28-0 | **0.85 J** | **0.23** | **0.08** | **0.86 J** | **0.71 J** | **2.5 J** | **2.1 J** |
| Tin | | 7440-31-5 | **155 J** | **8.9 J** | **2.1 J** | **63.1 J** | **130 J** | **140 J** | **169 J** |
| Vanadium | | 7440-62-2 | **109 J** | **16.0 J** | **10.6 J** | **73.6 J** | **90.1 J** | **39.3 J** | **43.6 J** |
| Zinc | | 7440-66-6 | **15800 J** | **317** | **65.8** | **2650 J** | **12400 J** | **4070 J** | **3960 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **9.8 J** | **4.5** | **2.6** | 2.9 UJ | **4.9 J** | **3.6 J** | **13.0 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1200 J** | **71.6 J** | 7.1 UJ | 145 UJ | **380 J** | **315 J** | **682 J** |
| Black Carbon | | BC | **15300 J** | **302000 J** | **14500 J** | **7120 J** | **8830 J** | **80900 J** | **73100 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **4.4 J** | **0.62 J** | **0.79 J** | **0.73 J** | **0.84 J** | **0.91 J** | **1.6 J** |
| pH (s.u.) | | pH | **7.5 J** | **8.3 J** | **8.3 J** | **7.6 J** | **8.0 J** | **7.8 J** | **7.7 J** |
| Sulfide | | 18496-25-8 | **18400 J** | **520** | **733** | **4890 J** | **9400 J** | **7720 J** | **14800 J** |
| Total Kjeldahl Nitrogen | | TKN | **10600 J** | 191 UJ | 213 UJ | **6840 J** | **8750 J** | **8470 J** | **9760 J** |
| Total Nitrogen | | 7727-37-9 | **10600 J** | 50.0 UJ | 50.0 UJ | **6840 J** | **8750 J** | **8470 J** | **9760 J** |
| Total Organic Carbon | | TOC | **164000 J** | **278000 J** | **21600 J** | **98200 J** | **153000 J** | **390000 J** | **244000 J** |
| Total Phosphorous | | 7723-14-0 | **277 J** | **426** | **293** | **2220 J** | **825 J** | **293 J** | **1290 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED10(3.28-6.50) | GPECSED10(6.50-10.1) | GPEC-XX-062410 | GPECSED10(10.1-12.3)NSU | GPECSED11(0-0.33) | GPECSED11(0.33-0.66) | GPECSED11(0.66-1.97) |
| | | Start Depth | 3.28 | 6.5 | 6.5 | 10.1 | 0 | 0.33 | 0.66 |
| | | End Depth | 6.5 | 10.1 | 10.1 | 12.3 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | GPEC-SED-10(6.50-10.1) | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Toluene | | 108-88-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | NA | NA | NA | **0.74 J** |
| Total BTEX | | TBTEX | NA | NA | NA | NA | NA | NA | **0.74** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | NA | NA | NA | 5 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Bromoform | | 75-25-2 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Bromomethane | | 74-83-9 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Chloroethane | | 75-00-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Chloroform | | 67-66-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Chloromethane | | 74-87-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | **0.3 J** |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | **1.5 J** |
| Methylene chloride | | 75-09-2 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Styrene | | 100-42-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Trichloroethene | | 79-01-6 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED10(3.28-6.50) | GPECSED10(6.50-10.1) | GPEC-XX-062410 | GPECSED10(10.1-12.3)NSU | GPECSED11(0-0.33) | GPECSED11(0.33-0.66) | GPECSED11(0.66-1.97) |
| | | Start Depth | 3.28 | 6.5 | 6.5 | 10.1 | 0 | 0.33 | 0.66 |
| | | End Depth | 6.5 | 10.1 | 10.1 | 12.3 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | GPEC-SED-10(6.50-10.1) | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | NA | NA | NA | 1.3 UJ |
| Total VOCs | | TVOC | NA | NA | NA | NA | NA | NA | **2.54** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **23 J** | **3** | **2** | **12** | **2.7 J** | **1.9 J** | **5 J** |
| Acenaphthylene | | 208-96-8 | **3.5 J** | **0.63 J** | **0.76 J** | **1.9 J** | **1.3 J** | **1.8 J** | **2.7 J** |
| Anthracene | | 120-12-7 | **23 J** | **4.3** | **2.5** | **11** | **2.5 J** | **2.4 J** | **6.1 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.1 J** | **1.8 J** | **1.3 J** | **3** | **4.1 J** | **5.6 J** | **6.4 J** |
| Fluoranthene | | 206-44-0 | **29 J** | **7** | **4.4** | **16** | **9 J** | **12 J** | **18 J** |
| Fluorene | | 86-73-7 | **18 J** | **2.1 J** | **1.1 J** | **8.5** | **1.1 J** | 6.9 UJ | 8.1 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **40 J** | **2.6** | **1.5 J** | **20** | **2.4 J** | **1.6 J** | **2.7 J** |
| Naphthalene | | 91-20-3 | **86 J** | **2.7** | **1.7 J** | **95** | **5.7 J** | **4 J** | **6.9 J** |
| Phenanthrene | | 85-01-8 | **77 J** | **12 J** | **5.6 J** | **36** | **4.5 J** | **2.6 J** | **5.2 J** |
| Pyrene | | 129-00-0 | **56 J** | **14** | **8.7** | **26** | **19 J** | **23 J** | **41 J** |
| Benz[a]anthracene | | 56-55-3 | **23 J** | **6.2** | **4.5** | **11** | **7.2 J** | **11 J** | **15 J** |
| Benzo[a]pyrene | | 50-32-8 | **14 J** | **3.3** | **2.6** | **6.4** | **6 J** | **8.1 J** | **12 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **13 J** | **3.6** | **2.7** | **6.7** | **8.9 J** | **9.9 J** | **13 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Chrysene | | 218-01-9 | **21 J** | **5.9** | **3.5** | **10** | **6 J** | **7.4 J** | **17 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | **1.7 J** | 2.5 UJ | **0.72 J** | **1.2 J** | 8 UJ | **2.2 J** | 8.1 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.5 J** | **0.99 J** | **1.2 J** | **2.4** | **3.3 J** | **4.3 J** | **4.7 J** |
| Total PAHs | | TPAH | **436.8** | **70.12** | **44.78** | **267.1** | **83.7** | **97.8** | **155.7** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **3.1 J** | 12 U | 9.9 U | **2.3 J** | 40 UJ | 34 UJ | 40 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 39 UJ | **29** | **21** | 20 U | **86 J** | **130 J** | **280 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Caprolactam | | 105-60-2 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| Carbazole | | 86-74-8 | **0.64 J** | 2.5 U | 2 U | **0.7 J** | 8 UJ | 6.9 UJ | 8.1 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 4-Chloroaniline | | 106-47-8 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| 2-Chlorophenol | | 95-57-8 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Dibenzofuran | | 132-64-9 | **4.5 J** | 12 U | 9.9 U | **2.2 J** | 40 UJ | 34 UJ | 40 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Diethyl phthalate | | 84-66-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Dimethyl phthalate | | 131-11-3 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 1,4-Dioxane | | 123-91-1 | 39 UJ | 25 U | 20 U | 20 U | 80 UJ | 69 UJ | 80 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Hexachlorobutadiene | | 87-68-3 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED10(3.28-6.50) | GPECSED10(6.50-10.1) | GPEC-XX-062410 | GPECSED10(10.1-12.3)NSU | GPECSED11(0-0.33) | GPECSED11(0.33-0.66) | GPECSED11(0.66-1.97) |
| | | | Start Depth | 3.28 | 6.5 | 6.5 | 10.1 | 0 | 0.33 | 0.66 |
| | | | End Depth | 6.5 | 10.1 | 10.1 | 12.3 | 0.33 | 0.66 | 1.97 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | | Parent Sample Code | | | GPEC-SED-10(6.50-10.1) | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 19 UJ | 12 UJ | 9.9 UJ | 9.8 UJ | 40 UJ | 34 UJ | 40 UJ |
| Hexachloroethane | | 67-72-1 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Isophorone | | 78-59-1 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2-Methylphenol | | 95-48-7 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2-Nitroaniline | | 88-74-4 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| 3-Nitroaniline | | 99-09-2 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| 4-Nitroaniline | | 100-01-6 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| Nitrobenzene | | 98-95-3 | 39 UJ | 25 U | 20 U | 20 U | 80 UJ | 69 UJ | 80 UJ |
| 2-Nitrophenol | | 88-75-5 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 4-Nitrophenol | | 100-02-7 | 98 UJ | 63 U | 51 U | 51 U | 200 UJ | 180 UJ | 200 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Pentachlorophenol | | 87-86-5 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Phenol | | 108-95-2 | 3.9 UJ | 2.5 U | 2 U | 2 U | 8 UJ | 6.9 UJ | 8.1 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 19 UJ | 12 U | 9.9 U | 9.8 U | 40 UJ | 34 UJ | 40 UJ |
| Total SVOCs | | TSVOC | **445.04** | **99.12** | **65.78** | **272.3** | **169.7** | **227.8** | **435.7** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1248 | | 12672-29-6 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | **2.5 J** | **2.6 J** | **4 J** |
| Aroclor 1254 | | 11097-69-1 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | **3 J** | **3.8 J** | **5.5 J** |
| Aroclor 1260 | | 11096-82-5 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.47 UJ | 0.31 UJ | 0.24 UJ | 0.25 UJ | 1 UJ | 0.81 UJ | 0.93 UJ |
| Total PCBs | | 1336-36-3 | ND | ND | ND | ND | **5.5** | **6.4** | **9.5** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | **12000 J** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | **3800 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | **9100 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | **240 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | **7600 J** |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | **7600 J** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | **800 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | **11 J** |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | **2200 J** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | **1500 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | **86 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | **240 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | **140 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | **320 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | **6600 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | **32000 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | **5200 J** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | **290 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | **950 J** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | **62 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | **470 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | **3500 J** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | **470 J** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | **190 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | **43 J** |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| alpha-bhc | | 319-84-6 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| beta-BHC | | 319-85-7 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED10(3.28-6.50) | GPECSED10(6.50-10.1) | GPEC-XX-062410 | GPECSED10(10.1-12.3)NSU | GPECSED11(0-0.33) | GPECSED11(0.33-0.66) | GPECSED11(0.66-1.97) |
| | | Start Depth | 3.28 | 6.5 | 6.5 | 10.1 | 0 | 0.33 | 0.66 |
| | | End Depth | 6.5 | 10.1 | 10.1 | 12.3 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | GPEC-SED-10(6.50-10.1) | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| delta-BHC | | 319-86-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| alpha-chlordane | | 5103-71-9 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | **0.12 J** | **0.15 J** |
| oxy-Chlordane | | 27304-13-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | **0.088 JN** | 0.093 UJ |
| o,p'-DDE | | 3424-82-6 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| 4,4'-DDE | | 72-55-9 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | **0.087 JN** | **0.14 JN** |
| o,p'-DDT | | 789-02-6 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | **0.26 J** |
| 4,4'-DDT | | 50-29-3 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | **0.16 J** | **0.19 J** | **0.36 J** |
| Dieldrin | | 60-57-1 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endosulfan I | | 959-98-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endosulfan II | | 33213-65-9 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endosulfan sulfate | | 1031-07-8 | **0.036 J** | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endrin | | 72-20-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Endrin ketone | | 53494-70-5 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Heptachlor | | 76-44-8 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | **0.06 J** | 0.081 UJ | 0.093 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Methoxychlor | | 72-43-5 | 0.094 UJ | 0.062 UJ | 0.048 UJ | 0.049 UJ | 0.2 UJ | 0.16 UJ | 0.19 UJ |
| Mirex | | 2385-85-5 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| Mitotane | | 53-19-0 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.047 UJ | 0.031 UJ | 0.024 UJ | 0.025 UJ | 0.1 UJ | 0.081 UJ | 0.093 UJ |
| trans-Nonachlor | | 39765-80-5 | 1.9 UJ | 1.2 UJ | 0.96 UJ | 0.99 UJ | 4 UJ | 3.2 UJ | 3.7 UJ |
| Toxaphene | | 8001-35-2 | 1.9 UJ | 1.2 UJ | 0.96 UJ | 0.99 UJ | 4 UJ | 3.2 UJ | 3.7 UJ |
| Total Pesticides | | TPEST | **0.036** | ND | ND | ND | **0.22** | **0.485** | **0.91** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| alpha-bhc | | 319-84-6 | **0.00022 J** | **0.00014 J** | **0.000063 J** | **0.00007 J** | NA | NA | NA |
| beta-BHC | | 319-85-7 | **0.00058 J** | **0.000063 J** | 0.00027 U | **0.000032 J** | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | 0.0045 UJ | **0.00012 J** | **0.000088 J** | **0.000068 J** | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | **0.00043 J** | **0.00012 J** | **0.000087 J** | **0.00006 J** | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.0045 UJ | **0.000041 J** | **0.000052 J** | **0.000026 J** | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | 0.0045 UJ | **0.00004 J** | 0.00027 U | 0.00034 U | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | **0.0015 J** | **0.0005 J** | **0.00024 J** | **0.00027 J** | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | 0.0045 UJ | **0.000085 J** | 0.00027 U | **0.000043 J** | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | **0.0034 J** | **0.00027 J** | 0.00027 UJ | **0.00013 J** | NA | NA | NA |
| delta-BHC | | 319-86-8 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| Dieldrin | | 60-57-1 | 0.0045 UJ | **0.00011 J** | 0.00027 U | **0.000076 J** | NA | NA | NA |
| Endosulfan I | | 959-98-8 | **0.0039 J** | **0.0021** | 0.00027 U | **0.0011** | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | **0.0026 J** | **0.001** | **0.00045** | **0.00045** | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | **0.00058 J** | **0.000036 J** | 0.00027 U | **0.000024 J** | NA | NA | NA |
| Endrin | | 72-20-8 | 0.0045 UJ | **0.00027 J** | 0.00027 U | **0.00014 J** | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | **0.0017 J** | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| gamma-BHC | | 58-89-9 | **0.0004 J** | **0.00007 J** | **0.000053 J** | **0.000041 J** | NA | NA | NA |
| Heptachlor | | 76-44-8 | 0.0045 UJ | 0.00058 U | 0.00027 U | **0.0000087 J** | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | **0.00043 J** | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | **0.0038 J** | **0.0022** | **0.0011** | **0.00094** | NA | NA | NA |
| Methoxychlor | | 72-43-5 | **0.22 J** | 0.00058 UJ | 0.00027 UJ | 0.00034 U | NA | NA | NA |
| Mirex | | 2385-85-5 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| Mitotane | | 53-19-0 | 0.0045 UJ | 0.00058 U | 0.00027 U | **0.000015 J** | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | 0.0045 UJ | 0.00058 U | 0.00027 U | 0.00034 U | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | 0.0045 UJ | **0.00012 J** | 0.00027 U | **0.000048 J** | NA | NA | NA |
| Toxaphene | | 8001-35-2 | 0.22 UJ | 0.14 U | 0.067 U | 0.085 U | NA | NA | NA |
| Total OC Pesticides | | NE | **0.23954** | **0.007285** | **0.002133** | **0.0035417** | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 20 UJ | 12 U | 10 U | 9.9 U | 40 UJ | 34 UJ | 40 UJ |
| 2,4-D | | 94-75-7 | 0.2 UJ | 0.12 U | 0.1 U | 0.099 U | 0.4 UJ | 0.34 UJ | 0.4 UJ |
| 2,4-DB | | 94-82-6 | 0.2 UJ | 0.12 U | 0.1 U | 0.099 U | 0.4 UJ | 0.34 UJ | 0.4 UJ |
| Dicamba | | 1918-00-9 | 0.098 UJ | 0.062 U | 0.052 U | 0.05 U | 0.2 UJ | 0.17 UJ | 0.2 UJ |
| Dichloroprop | | 120-36-5 | 0.2 UJ | 0.12 U | 0.1 U | 0.099 U | 0.4 UJ | 0.34 UJ | 0.4 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.22 UJ | 0.14 U | 0.12 U | 0.11 U | 0.45 UJ | 0.39 UJ | 0.45 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED10 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED10(3.28-6.50) | GPECSED10(6.50-10.1) | GPEC-XX-062410 | GPECSED10(10.1-12.3)NSU | GPECSED11(0-0.33) | GPECSED11(0.33-0.66) | GPECSED11(0.66-1.97) |
| | | | Start Depth | 3.28 | 6.5 | 6.5 | 10.1 | 0 | 0.33 | 0.66 |
| | | | End Depth | 6.5 | 10.1 | 10.1 | 12.3 | 0.33 | 0.66 | 1.97 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | | Parent Sample Code | | | GPEC-SED-10(6.50-10.1) | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Dinoseb | | 88-85-7 | 0.029 UJ | 0.019 U | 0.016 U | 0.015 U | 0.06 UJ | 0.052 UJ | 0.06 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 20 UJ | 12 U | 10 U | 9.9 U | 40 UJ | 34 UJ | 40 UJ |
| Silvex | | 93-72-1 | 0.049 UJ | 0.031 U | 0.026 U | 0.025 U | 0.1 UJ | 0.086 UJ | 0.1 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.049 UJ | 0.031 U | 0.026 U | 0.025 U | 0.1 UJ | 0.086 UJ | 0.1 UJ |
| **Metals** | mg/kg | | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | 0.00016 UJ | R | 0.00012 U | 0.0005 UJ | **0.00041 J** | 0.0005 UJ |
| **Total Metals** | mg/kg | | | | | | | | | |
| Aluminum | | 7429-90-5 | **20200 J** | **7810** | **6030** | **2800** | **12900 J** | **13900 J** | **19800 J** |
| Antimony | | 7440-36-0 | **13.2 J** | **2.2 J** | **1.6 J** | 0.12 UJ | **3.4 J** | **4.1 J** | **8.8 J** |
| Arsenic | | 7440-38-2 | **304 J** | **59.1 J** | **38 J** | **4.1 J** | **32.1 J** | **43.4 J** | **130 J** |
| Barium | | 7440-39-3 | **376 J** | **136 J** | **101 J** | **10 J** | **172 J** | **199 J** | **319 J** |
| Beryllium | | 7440-41-7 | **1.1 J** | **0.37 J** | **0.3 J** | **0.18 J** | **0.77 J** | **0.85 J** | **1.3 J** |
| Cadmium | | 7440-43-9 | **5 J** | **1.1 J** | **0.7 J** | **0.046 J** | **35.8 J** | **53.6 J** | **128 J** |
| Calcium | | 7440-70-2 | **9150 J** | **11400 J** | **9630 J** | **21300 J** | **13100 J** | **13900 J** | **19500 J** |
| Chromium | | 7440-47-3 | **205 J** | **27.1** | **21.1** | **9.5** | **286 J** | **419 J** | **1030 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **30.5 J** | **8.7** | **6.9** | **3.1 J** | **13.7 J** | **17 J** | **36.3 J** |
| Copper | | 7440-50-8 | **2200 J** | **461** | **307** | **16.2** | **1900 J** | **2670 J** | **6480 J** |
| Iron | | 7439-89-6 | **42400 J** | **16000** | **12600** | **9930** | **29100 J** | **29500 J** | **50400 J** |
| Lead | | 7439-92-1 | **828 J** | **166** | **119** | **5.4** | **677 J** | **861 J** | **1700 J** |
| Magnesium | | 7439-95-4 | **9520 J** | **7560** | **6350** | **10700** | **11800 J** | **11500 J** | **14300 J** |
| Manganese | | 7439-96-5 | **415 J** | **181** | **146** | **145** | **223 J** | **242 J** | **370 J** |
| Mercury | | 7439-97-6 | **0.48 J** | **0.365 J** | **0.997 J** | **0.0155 J** | **2.23 J** | **4.73 J** | **4.84 J** |
| Nickel | | 7440-02-0 | **424 J** | **55.9 J** | **39.5 J** | **8 J** | **299 J** | **443 J** | **1210 J** |
| Potassium | | 7440-09-7 | **3840 J** | **1890 J** | **1570 J** | **437 J** | **3810 J** | **3670 J** | **4430 J** |
| Selenium | | 7782-49-2 | **64.8 J** | **5.3 J** | **4.1 J** | **0.25 J** | **3 J** | **3.7 J** | **12.1 J** |
| Silver | | 7440-22-4 | **9.1 J** | **0.98 J** | **0.72 J** | 0.062 UJ | **13.6 J** | **17.9 J** | **36.1 J** |
| Sodium | | 7440-23-5 | **3200 J** | **506** | **395** | **203** | **30600 J** | **24700 J** | **26600 J** |
| Thallium | | 7440-28-0 | **1.9 J** | **0.54** | **0.38** | **0.061 J** | **0.66 J** | **0.73 J** | **1.1 J** |
| Tin | | 7440-31-5 | **49 J** | **8.4** | **5.6** | 0.31 UJ | **51.6 J** | **64.2 J** | **118 J** |
| Vanadium | | 7440-62-2 | **56.5 J** | **25.8** | **20.4** | **15.3** | **59.2 J** | **68.5 J** | **123 J** |
| Zinc | | 7440-66-6 | **1420 J** | **256 J** | **176 J** | **19.6 J** | **2050 J** | **2890 J** | **7410 J** |
| **Cyanides** | mg/kg | | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **2.4 J** | 0.78 U | 0.65 U | 0.62 U | **0.69 J** | **0.76 J** | **3.1 J** |
| **Other** | mg/kg | | | | | | | | | |
| Ammonia | | 7664-41-7 | **612 J** | **69.9 J** | 32.5 UJ | 30.9 U | 125 UJ | 108 UJ | 126 UJ |
| Black Carbon | | BC | **10300 J** | **5540 J** | **6040 J** | **11500 J** | **5800 J** | **6780 J** | **6080 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **2.4 J** | **0.53 J** | 1.3 U | 1.2 U | **0.73 J** | 4.3 UJ | 5.0 UJ |
| pH (s.u.) | | pH | **7.7 J** | **8.6 J** | **8.7 J** | **8.2 J** | **7.5 J** | **7.8 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **1060 J** | **286 J** | **827 J** | **89.1 J** | **5240 J** | **6050 J** | **9060 J** |
| Total Kjeldahl Nitrogen | | TKN | **6140 J** | **1350 J** | **2080 J** | 186 UJ | **6330 J** | **5820 J** | **10400 J** |
| Total Nitrogen | | 7727-37-9 | **6140 J** | **1350 J** | **2080 J** | 50.0 UJ | **6330 J** | **5820 J** | **10400 J** |
| Total Organic Carbon | | TOC | **83200 J** | **14700 J** | **20600 J** | **10700 J** | **93500 J** | **106000 J** | **111000 J** |
| Total Phosphorous | | 7723-14-0 | **703 J** | **586 J** | **473 J** | **69.2 J** | **1230 J** | **1850 J** | **4360 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED12 | GPEC-SED12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED11(1.97-3.28) | GPECSED11(3.28-6.56) | GPECSED11(6.56-7.5) | GPECSED11(7.5-9.5)NSU | GPEC-XX-062410B | GPECSED12(0-0.33) | GPECSED12(0.33-0.66) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 7.5 | 7.5 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 7.5 | 9.5 | 9.5 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-11(7.5-9.5)NSU | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | **0.38 J** | NA | NA | NA | **0.32 J** | NA |
| Toluene | | 108-88-3 | NA | 0.77 UJ | NA | NA | NA | **0.44 J** | NA |
| Ethylbenzene | | 100-41-4 | NA | **0.66 J** | NA | NA | NA | **1.3 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | **1 J** | NA | NA | NA | **2.3 J** | NA |
| Total BTEX | | TBTEX | NA | **2.04** | NA | NA | NA | **4.36** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | **1.2 J** | NA | NA | NA | 5.3 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Bromodichloromethane | | 75-27-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Bromoform | | 75-25-2 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Bromomethane | | 74-83-9 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 2-Butanone | | 78-93-3 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Carbon disulfide | | 75-15-0 | NA | **0.17 J** | NA | NA | NA | 1.3 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Chlorobenzene | | 108-90-7 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Chloroethane | | 75-00-3 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Chloroform | | 67-66-3 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Chloromethane | | 74-87-3 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Cyclohexane | | 110-82-7 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Dibromochloromethane | | 124-48-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Isopropyl benzene | | 98-82-8 | NA | **0.092 J** | NA | NA | NA | **0.21 J** | NA |
| Methyl acetate | | 79-20-9 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Methylcyclohexane | | 108-87-2 | NA | **0.16 J** | NA | NA | NA | **0.22 J** | NA |
| Methylene chloride | | 75-09-2 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Styrene | | 100-42-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Tetrachloroethene | | 127-18-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Trichloroethene | | 79-01-6 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED12 | GPEC-SED12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED11(1.97-3.28) | GPECSED11(3.28-6.56) | GPECSED11(6.56-7.5) | GPECSED11(7.5-9.5)NSU | GPEC-XX-062410B | GPECSED12(0-0.33) | GPECSED12(0.33-0.66) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 7.5 | 7.5 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 7.5 | 9.5 | 9.5 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-11(7.5-9.5)NSU | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Vinyl chloride | | 75-01-4 | NA | 0.77 UJ | NA | NA | NA | 1.3 UJ | NA |
| Total VOCs | | TVOC | NA | **3.662** | NA | NA | NA | **4.79** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **6.1 J** | **180 J** | **4.2** | **1.8 J** | **1.9 J** | **3.2 J** | **5.1 J** |
| Acenaphthylene | | 208-96-8 | **2.1 J** | **31 J** | **0.91 J** | **0.46 J** | **0.52 J** | **1.7 J** | **2.3 J** |
| Anthracene | | 120-12-7 | **6.9 J** | **110 J** | **3.7** | **0.94 J** | **1.7 J** | **2.1 J** | **4.3 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.7 J** | **29 J** | **2.5** | **1.1 J** | **1.1 J** | 7.9 UJ | 10 UJ |
| Fluoranthene | | 206-44-0 | **17 J** | **110 J** | **7.2** | **2.8** | **3.4** | **9.4 J** | **17 J** |
| Fluorene | | 86-73-7 | **2.8 J** | **100 J** | **2.3** | 2 U | **0.58 J** | 7.9 UJ | 10 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **3.8 J** | **430 J** | **3.9** | **0.79 J** | **1.5 J** | **1.1 J** | **1.4 J** |
| Naphthalene | | 91-20-3 | **9.2 J** | **930 J** | **8.1** | **1.2 J** | **2.1** | **3.8 J** | **4.8 J** |
| Phenanthrene | | 85-01-8 | **11 J** | **370 J** | **11** | **1.4 J** | **3.5** | 7.9 UJ | 10 UJ |
| Pyrene | | 129-00-0 | **33 J** | **210 J** | **15** | **5.4** | **7.4** | **18 J** | **30 J** |
| Benz[a]anthracene | | 56-55-3 | **13 J** | **74 J** | **6.9** | **2.2** | **3.3** | 7.9 UJ | 10 UJ |
| Benzo[a]pyrene | | 50-32-8 | **8.2 J** | **58 J** | **3.6** | **1.5 J** | **1.9 J** | 7.9 UJ | 10 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | **11 J** | **48 J** | **3.9** | **1.8 J** | **2.4** | 7.9 UJ | 10 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 U |
| Chrysene | | 218-01-9 | **13 J** | **69 J** | **5.9** | **2** | **2.7** | 7.9 UJ | 10 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 6.1 UJ | 9.5 UJ | 2.2 UJ | 2 UJ | 2.1 UJ | 7.9 UJ | 10 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.5 J** | **17 J** | **1.1 J** | **0.72 J** | **0.88 J** | 7.9 UJ | 10 UJ |
| Total PAHs | | TPAH | **146.3** | **2766** | **80.21** | **24.11** | **34.88** | **39.3** | **64.9** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 30 UJ | **45 J** | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **370 J** | **45 J** | **26** | **23** | **27** | **62 J** | **100 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Caprolactam | | 105-60-2 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| Carbazole | | 86-74-8 | 6.1 UJ | **4.7 J** | 2.2 U | 2 U | 2.1 U | 7.9 UJ | **1.1 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 4-Chloroaniline | | 106-47-8 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| 2-Chlorophenol | | 95-57-8 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Dibenzofuran | | 132-64-9 | 30 UJ | **21 J** | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| Diethyl phthalate | | 84-66-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Dimethyl phthalate | | 131-11-3 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 1,4-Dioxane | | 123-91-1 | 61 UJ | 94 UJ | 22 U | 20 U | 21 U | 79 UJ | 99 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| Hexachlorobutadiene | | 87-68-3 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED12 | GPEC-SED12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED11(1.97-3.28) | GPECSED11(3.28-6.56) | GPECSED11(6.56-7.5) | GPECSED11(7.5-9.5)NSU | GPEC-XX-062410B | GPECSED12(0-0.33) | GPECSED12(0.33-0.66) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 7.5 | 7.5 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 7.5 | 9.5 | 9.5 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-11(7.5-9.5)NSU | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 30 UJ | 47 UJ | 11 UJ | 9.9 UJ | 10 UJ | 39 UJ | 49 UJ |
| Hexachloroethane | | 67-72-1 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Isophorone | | 78-59-1 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2-Methylphenol | | 95-48-7 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2-Nitroaniline | | 88-74-4 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| 3-Nitroaniline | | 99-09-2 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| 4-Nitroaniline | | 100-01-6 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| Nitrobenzene | | 98-95-3 | 61 UJ | 94 UJ | 22 U | 20 U | 21 U | 79 UJ | 99 UJ |
| 2-Nitrophenol | | 88-75-5 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 4-Nitrophenol | | 100-02-7 | 160 UJ | 240 UJ | 56 U | 51 U | 53 U | 200 UJ | 250 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Pentachlorophenol | | 87-86-5 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Phenol | | 108-95-2 | 6.1 UJ | 9.5 UJ | 2.2 U | 2 U | 2.1 U | 7.9 UJ | 10 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 30 UJ | 47 UJ | 11 U | 9.9 U | 10 U | 39 UJ | 49 UJ |
| Total SVOCs | | TSVOC | **516.3** | **2881.7** | **106.21** | **47.11** | **61.88** | **101.3** | **166** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1248 | | 12672-29-6 | **4.6 J** | **2 J** | 0.3 UJ | 0.26 U | 0.26 U | **6.2 J** | **13 J** |
| Aroclor 1254 | | 11097-69-1 | **6.3 J** | **2.7 J** | 0.3 UJ | 0.26 U | 0.26 U | **5.1 J** | **10 J** |
| Aroclor 1260 | | 11096-82-5 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.79 UJ | 0.6 UJ | 0.3 UJ | 0.26 U | 0.26 U | 1 UJ | 1.1 UJ |
| Total PCBs | | 1336-36-3 | **10.9** | **4.7** | ND | ND | ND | **11.3** | **23** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | **270** | NA | NA | **7700 J** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | **54** | NA | NA | **3300 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | **210** | NA | NA | **6000 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | **5.5 J** | NA | NA | **160 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | **110** | NA | NA | **6600 J** |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | **180** | NA | NA | **4600 J** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | **20 J** | NA | NA | **560 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | 45 U | NA | NA | 250 UJ |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | **34** | NA | NA | **1500 J** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | **39 J** | NA | NA | **870 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | 45 U | NA | NA | **71 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | **2.9 J** | NA | NA | **170 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | **3.5 J** | NA | NA | **120 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | **4.9 J** | NA | NA | **190 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | **140** | NA | NA | **3800 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | **690** | NA | NA | **32000 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | **140** | NA | NA | **2300 J** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | **8.6 J** | NA | NA | **140 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | **10** | NA | NA | **470 J** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | 45 U | NA | NA | **59 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | **13 J** | NA | NA | **230 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | **100** | NA | NA | **1600 J** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | **8.2** | NA | NA | **290 J** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | **6.6 J** | NA | NA | **130 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | **1.4 J** | NA | NA | **21 J** |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| alpha-bhc | | 319-84-6 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| beta-BHC | | 319-85-7 | **0.22 J** | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED12 | GPEC-SED12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED11(1.97-3.28) | GPECSED11(3.28-6.56) | GPECSED11(6.56-7.5) | GPECSED11(7.5-9.5)NSU | GPEC-XX-062410B | GPECSED12(0-0.33) | GPECSED12(0.33-0.66) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 7.5 | 7.5 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 7.5 | 9.5 | 9.5 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-11(7.5-9.5)NSU | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | **0.087 J** |
| delta-BHC | | 319-86-8 | 0.079 UJ | **0.067 JN** | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| alpha-chlordane | | 5103-71-9 | 0.079 UJ | **0.066 JN** | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.17 J** | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | **0.24 J** | **0.32 J** |
| oxy-Chlordane | | 27304-13-8 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | **0.13 JN** |
| o,p'-DDE | | 3424-82-6 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| 4,4'-DDE | | 72-55-9 | **0.15 JN** | **0.13 JN** | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| o,p'-DDT | | 789-02-6 | **0.27 J** | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| 4,4'-DDT | | 50-29-3 | **0.37 J** | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Dieldrin | | 60-57-1 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Endosulfan I | | 959-98-8 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Endosulfan II | | 33213-65-9 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Endrin | | 72-20-8 | 0.079 UJ | **0.093 J** | 0.029 UJ | 0.026 UJ | 0.026 U | **0.1 J** | **0.18 J** |
| Endrin aldehyde | | 7421-93-4 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 UJ | 0.1 UJ | 0.11 UJ |
| Endrin ketone | | 53494-70-5 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Heptachlor | | 76-44-8 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Heptachlor epoxide | | 1024-57-3 | **0.1 J** | **0.056 J** | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 UJ | 0.1 UJ | 0.11 UJ |
| Methoxychlor | | 72-43-5 | 0.16 UJ | 0.12 UJ | 0.059 UJ | 0.052 UJ | 0.052 U | 0.21 UJ | 0.23 UJ |
| Mirex | | 2385-85-5 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| Mitotane | | 53-19-0 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | **0.14 J** | 0.11 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.079 UJ | 0.06 UJ | 0.029 UJ | 0.026 UJ | 0.026 U | 0.1 UJ | 0.11 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.2 UJ | 2.4 UJ | 1.2 UJ | 1 UJ | 1 U | 4.2 UJ | 4.6 UJ |
| Toxaphene | | 8001-35-2 | 3.2 UJ | 2.4 UJ | 1.2 UJ | 1 UJ | 1 U | 4.2 UJ | 4.6 UJ |
| Total Pesticides | | TPEST | **1.28** | **0.412** | ND | ND | ND | **0.48** | **0.717** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | 0.0024 U | 0.00029 U | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | **0.00013 J** | 0.00029 U | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | **0.00024 J** | **0.000042 J** | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | **0.00086 J** | **0.0014** | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | **0.0011 J** | **0.0019** | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | 0.0024 U | 0.00029 U | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | **0.0011 J** | **0.0016** | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | 0.0024 U | **0.00017 J** | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | **0.002** | **0.0025** | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | 0.0024 U | 0.00029 U | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | **0.0022 J** | **0.00016 J** | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | 0.0024 U | 0.00029 U | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | **0.00095 J** | **0.0014** | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | **0.0024** | 0.00029 U | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | **0.0018 J** | **0.00021 J** | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | **0.00049 J** | **0.000027 J** | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | 0.0024 UJ | 0.00029 U | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | 0.0024 U | 0.00029 UJ | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | **0.00053 J** | 0.00029 UJ | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | **0.00021 J** | **0.000039 J** | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | 0.0024 U | 0.00029 U | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | **0.0002 J** | **0.000011 J** | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | **0.0028** | **0.00049** | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | **0.085 J** | **0.00091 J** | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | 0.0024 U | **0.000014 J** | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | **0.00057 J** | **0.00083** | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | 0.0024 U | **0.00031** | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | **0.00047 J** | **0.00054** | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | 0.12 U | 0.074 U | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | **0.10305** | **0.012553** | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 32 UJ | 25 UJ | 12 U | 11 U | 10 U | 42 UJ | 50 UJ |
| 2,4-D | | 94-75-7 | 0.32 UJ | 0.25 UJ | 0.12 U | 0.11 U | 0.1 U | 0.42 UJ | 0.5 UJ |
| 2,4-DB | | 94-82-6 | 0.32 UJ | 0.25 UJ | 0.12 U | 0.11 U | 0.1 U | 0.42 UJ | 0.5 UJ |
| Dicamba | | 1918-00-9 | 0.16 UJ | 0.12 UJ | 0.059 U | 0.053 U | 0.052 U | 0.21 UJ | 0.25 UJ |
| Dichloroprop | | 120-36-5 | 0.32 UJ | 0.25 UJ | 0.12 U | 0.11 U | 0.1 U | 0.42 UJ | 0.5 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.36 UJ | R | 0.13 U | 0.12 U | 0.12 U | 0.48 UJ | 0.56 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED11 | GPEC-SED12 | GPEC-SED12 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED11(1.97-3.28) | GPECSED11(3.28-6.56) | GPECSED11(6.56-7.5) | GPECSED11(7.5-9.5)NSU | GPEC-XX-062410B | GPECSED12(0-0.33) | GPECSED12(0.33-0.66) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 7.5 | 7.5 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 7.5 | 9.5 | 9.5 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-11(7.5-9.5)NSU | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.047 UJ | 0.037 UJ | 0.018 UJ | 0.016 UJ | 0.016 UJ | 0.064 UJ | 0.074 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 32 UJ | 25 UJ | 12 U | 11 U | 10 U | 42 UJ | 50 UJ |
| Silvex | | 93-72-1 | 0.079 UJ | 0.061 UJ | 0.03 U | 0.027 U | 0.026 U | 0.11 UJ | 0.12 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.079 UJ | 0.061 UJ | 0.03 U | 0.027 U | 0.026 U | 0.11 UJ | 0.12 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.0004 UJ | R | **0.000086 J** | 0.00013 U | 0.00013 UJ | 0.00053 UJ | 0.00062 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **16600 J** | **14800 J** | **7500** | **4970** | **4960** | **14700 J** | **19000 J** |
| Antimony | | 7440-36-0 | **8.7 J** | **22.2 J** | **6.1 J** | 0.13 UJ | **1.6 J** | **4.3 J** | **6.2 J** |
| Arsenic | | 7440-38-2 | **116 J** | **176 J** | **90.8 J** | **4.5 J** | **48.1 J** | **45 J** | **79.7 J** |
| Barium | | 7440-39-3 | **251 J** | **316 J** | **146 J** | **44 J** | **65.1 J** | **195 J** | **274 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1.3 J** | **0.36 J** | **0.25 J** | **0.25 J** | **0.85 J** | **1.1 J** |
| Cadmium | | 7440-43-9 | **111 J** | **169 J** | **2.9 J** | **0.25 J** | **0.88 J** | **37.5 J** | **69.8 J** |
| Calcium | | 7440-70-2 | **16200 J** | **16800 J** | **11900 J** | **15000 J** | **13800 J** | **14300 J** | **19400 J** |
| Chromium | | 7440-47-3 | **903 J** | **1400 J** | **49.3** | **14.8** | **20.1** | **321 J** | **584 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **31.3 J** | **44.6 J** | **13.9** | **5.1** | **6.7** | **16.6 J** | **24.7 J** |
| Copper | | 7440-50-8 | **5810 J** | **8790 J** | **962** | **35.2 J** | **250 J** | **2270 J** | **4040 J** |
| Iron | | 7439-89-6 | **41000 J** | **39200 J** | **18400** | **11800** | **14300** | **34400 J** | **47100 J** |
| Lead | | 7439-92-1 | **1450 J** | **1650 J** | **435** | **11.4 J** | **76.9 J** | **711 J** | **1150 J** |
| Magnesium | | 7439-95-4 | **11200 J** | **7780 J** | **5990** | **7900** | **6910** | **13000 J** | **16200 J** |
| Manganese | | 7439-96-5 | **322 J** | **270 J** | **192** | **214** | **206** | **256 J** | **338 J** |
| Mercury | | 7439-97-6 | **8.63 J** | **7.2 J** | **1.64 J** | **0.27 J** | **0.543 J** | **3.12 J** | **5.01 J** |
| Nickel | | 7440-02-0 | **1080 J** | **2210 J** | **123 J** | **16.5 J** | **41.2 J** | **360 J** | **652 J** |
| Potassium | | 7440-09-7 | **3220 J** | **2680 J** | **1580 J** | **1360 J** | **1240 J** | **4150 J** | **5040 J** |
| Selenium | | 7782-49-2 | **10.1 J** | **13.2 J** | **12.3 J** | **0.48 J** | **3.7 J** | **5.6 J** | **8.8 J** |
| Silver | | 7440-22-4 | **31.8 J** | **39.7 J** | **2.3 J** | **0.091 J** | **0.53 J** | **14.7 J** | **23.7 J** |
| Sodium | | 7440-23-5 | **14000 J** | **8120 J** | **845** | **260** | **302** | **31000 J** | **35200 J** |
| Thallium | | 7440-28-0 | **0.81 J** | **0.91 J** | **1.2** | **0.16 J** | **0.31 J** | **0.73 J** | **1.1 J** |
| Tin | | 7440-31-5 | **103 J** | **126 J** | **15.6** | **0.74 J** | **4 J** | **57.4 J** | **86.4 J** |
| Vanadium | | 7440-62-2 | **123 J** | **102 J** | **23.8** | **19.4** | **20.4** | **72.1 J** | **106 J** |
| Zinc | | 7440-66-6 | **6340 J** | **10600 J** | **593 J** | **44 J** | **164 J** | **2580 J** | **4540 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **4.1 J** | **9.5 J** | 0.74 U | 0.67 U | 0.65 U | **0.68 J** | **1.5 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1110 J** | **916 J** | **122 J** | 33.3 U | 32.4 U | 26.5 UJ | **579 J** |
| Black Carbon | | BC | **9930 J** | **19600 J** | **10200 J** | **7500 J** | **6900 J** | **9050 J** | **8880 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.94 J** | **1.5 J** | **0.61 J** | 1.3 U | **0.27 J** | **1.7 J** | **1.7 J** |
| pH (s.u.) | | pH | **7.6 J** | **8.1 J** | **8.4 J** | **8.9 J** | **8.6 J** | **7.5 J** | **7.7 J** |
| Sulfide | | 18496-25-8 | **7390 J** | **9510 J** | **1660** | **149 J** | **93.3 J** | **11200 J** | **8710 J** |
| Total Kjeldahl Nitrogen | | TKN | **7670 J** | **8020 J** | **1990 J** | 200 UJ | 194 UJ | **6710 J** | **6450 J** |
| Total Nitrogen | | 7727-37-9 | **7670 J** | **8020 J** | **1990 J** | 50.0 UJ | 50.0 UJ | **6710 J** | **6450 J** |
| Total Organic Carbon | | TOC | **145000 J** | **139000 J** | **48600 J** | **9200 J** | **11100 J** | **89000 J** | **92600 J** |
| Total Phosphorous | | 7723-14-0 | **3390 J** | **1470 J** | **139 J** | **432 J** | **532 J** | **457 J** | **4730 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED13 | GPEC-SED13 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED12(0.66-1.97) | GPECSED12(1.97-3.28) | GPECSED12(3.28-6.56) | GPECSED12(6.56-8.66) | GPECSED12(8.66-11.75NSU) | GPECSED13(0-0.33) | GPECSED13(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.66 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 8.66 | 11.75 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | **80 J** | **11** | **0.5 J** | NA |
| Toluene | | 108-88-3 | NA | NA | NA | **150 J** | **4.5** | 1.1 UJ | NA |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | **140 J** | **39** | **3.9 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | **150 J** | **43** | **3.9 J** | NA |
| Total BTEX | | TBTEX | NA | NA | NA | **520** | **97.5** | **8.3** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | 22 UJ | 13 U | 4.6 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Bromoform | | 75-25-2 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Bromomethane | | 74-83-9 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 2-Butanone | | 78-93-3 | NA | NA | NA | 5.5 U | 3.2 U | 1.1 UJ | NA |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Chloroethane | | 75-00-3 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Chloroform | | 67-66-3 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Chloromethane | | 74-87-3 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Cyclohexane | | 110-82-7 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | **9.3 J** | **3.6** | **0.41 J** | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | 5.5 UJ | 3.2 UJ | 1.1 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Methylene chloride | | 75-09-2 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Styrene | | 100-42-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | 5.5 UJ | 3.2 UJ | 1.1 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Trichloroethene | | 79-01-6 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | 5.5 U | 3.2 U | 1.1 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED13 | GPEC-SED13 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED12(0.66-1.97) | GPECSED12(1.97-3.28) | GPECSED12(3.28-6.56) | GPECSED12(6.56-8.66) | GPECSED12(8.66-11.75NSU) | GPECSED13(0-0.33) | GPECSED13(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.66 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 8.66 | 11.75 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | 5.5 UJ | 3.2 U | 1.1 UJ | NA |
| Total VOCs | | TVOC | NA | NA | NA | **529.3** | **101.1** | **8.71** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **5.6 J** | **10 J** | **71 J** | **220 J** | **42** | 7.4 UJ | **120 J** |
| Acenaphthylene | | 208-96-8 | **2.2 J** | **3.7 J** | **18 J** | **55 J** | **9** | **2.4 J** | **22 J** |
| Anthracene | | 120-12-7 | **6.4 J** | **9.5 J** | **48 J** | **120 J** | **21** | 7.4 UJ | **86 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Fluoranthene | | 206-44-0 | **19 J** | **27 J** | **70 J** | **130 J** | **21** | **13 J** | **130 J** |
| Fluorene | | 86-73-7 | **2.5 J** | **8.5 J** | **48 J** | **140 J** | **26** | 7.4 UJ | **87 J** |
| 2-Methylnaphthalene | | 91-57-6 | **2.4 J** | **4 J** | **150 J** | **530 J** | **92** | 7.4 UJ | **410 J** |
| Naphthalene | | 91-20-3 | **6.7 J** | **29 J** | **600 J** | **3800** | **410** | 7.4 UJ | **1300 J** |
| Phenanthrene | | 85-01-8 | 8.3 UJ | 13 UJ | **200 J** | **420 J** | **73** | 7.4 UJ | **310 J** |
| Pyrene | | 129-00-0 | **35 J** | **41 J** | **140 J** | **260 J** | **43** | **14 J** | **190 J** |
| Benz[a]anthracene | | 56-55-3 | 8.3 UJ | 13 UJ | 15 UJ | **110 J** | **15** | 7.4 UJ | **68 J** |
| Benzo[a]pyrene | | 50-32-8 | 8.3 UJ | 13 UJ | 15 UJ | **82 J** | **12** | 7.4 UJ | 20 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | 8.3 UJ | 13 UJ | 15 UJ | **67 J** | 3.9 U | 7.4 UJ | 20 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 8.3 UJ | 13 UJ | 15 U | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Chrysene | | 218-01-9 | 8.3 UJ | 13 UJ | 15 UJ | **110 J** | **18** | 7.4 UJ | 20 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Total PAHs | | TPAH | **79.8** | **132.7** | **1345** | **6044** | **782** | **29.4** | **2723** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 41 UJ | 66 UJ | **20 J** | **60 J** | **10 J** | 36 UJ | **36 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **280 J** | **510 J** | **160 J** | **67 J** | 39 U | **80 J** | 200 UJ |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Caprolactam | | 105-60-2 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| Carbazole | | 86-74-8 | 8.3 UJ | 13 UJ | 15 UJ | **9.2 J** | **1.3 J** | 7.4 UJ | 20 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 4-Chloroaniline | | 106-47-8 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| 2-Chlorophenol | | 95-57-8 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Dibenzofuran | | 132-64-9 | 41 UJ | 66 UJ | 75 UJ | **21 J** | **3.9 J** | 36 UJ | **23 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Diethyl phthalate | | 84-66-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Dimethyl phthalate | | 131-11-3 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 1,4-Dioxane | | 123-91-1 | 82 UJ | 130 UJ | 150 UJ | 140 UJ | 39 U | 74 UJ | 200 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Hexachlorobutadiene | | 87-68-3 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED13 | GPEC-SED13 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED12(0.66-1.97) | GPECSED12(1.97-3.28) | GPECSED12(3.28-6.56) | GPECSED12(6.56-8.66) | GPECSED12(8.66-11.75NSU) | GPECSED13(0-0.33) | GPECSED13(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.66 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 8.66 | 11.75 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Hexachloroethane | | 67-72-1 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Isophorone | | 78-59-1 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2-Methylphenol | | 95-48-7 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2-Nitroaniline | | 88-74-4 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| 3-Nitroaniline | | 99-09-2 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| 4-Nitroaniline | | 100-01-6 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| Nitrobenzene | | 98-95-3 | 82 UJ | 130 UJ | 150 UJ | 140 UJ | 39 U | 74 UJ | 200 UJ |
| 2-Nitrophenol | | 88-75-5 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 4-Nitrophenol | | 100-02-7 | 210 UJ | 340 UJ | 380 UJ | 340 UJ | 100 U | 190 UJ | 510 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Pentachlorophenol | | 87-86-5 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Phenol | | 108-95-2 | 8.3 UJ | 13 UJ | 15 UJ | 14 UJ | 3.9 U | 7.4 UJ | 20 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 41 UJ | 66 UJ | 75 UJ | 67 UJ | 19 U | 36 UJ | 99 UJ |
| Total SVOCs | | TSVOC | **359.8** | **642.7** | **1525** | **6201.2** | **797.2** | **109.4** | **2782** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1248 | | 12672-29-6 | **24 J** | **52 J** | **49 J** | **20 J** | 0.25 U | **0.54 J** | 0.61 UJ |
| Aroclor 1254 | | 11097-69-1 | **17 J** | **29 J** | **30 J** | **16 J** | 0.25 U | **1.1 J** | 0.61 UJ |
| Aroclor 1260 | | 11096-82-5 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.99 UJ | 0.83 UJ | 0.63 UJ | 0.41 UJ | 0.25 U | 0.88 UJ | 0.61 UJ |
| Total PCBs | | 1336-36-3 | **41** | **81** | **79** | **36** | ND | **1.64** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **12000 J** | **22000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **3400 J** | **6600 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **10000 J** | **18000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **200 J** | **340 J** | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **6800 J** | **13000 J** | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | **6900 J** | **13000 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **770 J** | **1400 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | **15 J** | **17 J** | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **1500 J** | **2600 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **1500 J** | **3000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **68 J** | **100 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **170 J** | **280 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **130 J** | **150 J** | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **230 J** | **370 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **6400 J** | **11000 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **36000 J** | **63000 J** | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **3300 J** | **6300 J** | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **200 J** | **380 J** | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **660 J** | **880 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **57 J** | **76 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **340 J** | **640 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **2500 J** | **5400 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **350 J** | **660 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **180 J** | **280 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **38 J** | **65 J** | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.099 UJ | **0.43 J** | **0.26 J** | **0.12 J** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| alpha-bhc | | 319-84-6 | 0.099 UJ | 0.083 UJ | **0.082 J** | **0.09 J** | 0.025 UJ | 0.088 UJ | **0.012 J** |
| beta-BHC | | 319-85-7 | 0.099 UJ | **0.53 J** | **0.16 JN** | **0.041 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED13 | GPEC-SED13 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED12(0.66-1.97) | GPECSED12(1.97-3.28) | GPECSED12(3.28-6.56) | GPECSED12(6.56-8.66) | GPECSED12(8.66-11.75NSU) | GPECSED13(0-0.33) | GPECSED13(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.66 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 8.66 | 11.75 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.099 UJ | 0.083 UJ | **0.13 JN** | **0.071 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| delta-BHC | | 319-86-8 | 0.099 UJ | **0.4 JN** | **0.16 J** | **0.088 J** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| alpha-chlordane | | 5103-71-9 | **0.16 J** | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.28 J** | **0.2 JN** | **0.24 JN** | **0.15 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.099 UJ | **0.18 JN** | **0.075 JN** | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| o,p'-DDE | | 3424-82-6 | 0.099 UJ | **0.087 JN** | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| 4,4'-DDE | | 72-55-9 | 0.099 UJ | **0.1 JN** | **0.29 JN** | **0.2 JN** | 0.025 UJ | 0.088 UJ | **0.023 J** |
| o,p'-DDT | | 789-02-6 | 0.099 UJ | 0.083 UJ | **0.47 J** | **0.26 J** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| 4,4'-DDT | | 50-29-3 | 0.099 UJ | **0.34 J** | **0.62 J** | **0.36 J** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Dieldrin | | 60-57-1 | 0.099 UJ | **0.13 J** | **0.32 J** | **0.12 J** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endosulfan I | | 959-98-8 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endosulfan II | | 33213-65-9 | 0.099 UJ | 0.083 UJ | **0.22 JN** | **0.12 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.099 UJ | 0.083 UJ | 0.063 UJ | **0.073 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endrin | | 72-20-8 | **0.23 J** | **0.25 J** | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Endrin ketone | | 53494-70-5 | **0.17 J** | **0.28 JN** | **0.08 JN** | **0.047 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Heptachlor | | 76-44-8 | 0.099 UJ | **0.3 JN** | **0.22 JN** | **0.1 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.099 UJ | 0.083 UJ | 0.063 UJ | **0.05 JN** | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Methoxychlor | | 72-43-5 | 0.2 UJ | **0.41 J** | 0.13 UJ | 0.083 UJ | 0.05 UJ | 0.18 UJ | 0.12 UJ |
| Mirex | | 2385-85-5 | 0.099 UJ | 0.083 UJ | **0.103 J** | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| Mitotane | | 53-19-0 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.099 UJ | 0.083 UJ | 0.063 UJ | 0.041 UJ | 0.025 UJ | 0.088 UJ | 0.061 UJ |
| trans-Nonachlor | | 39765-80-5 | 4 UJ | 3.3 UJ | 2.5 UJ | 1.7 UJ | 1 UJ | 3.5 UJ | 2.4 UJ |
| Toxaphene | | 8001-35-2 | 4 UJ | 3.3 UJ | 2.5 UJ | 1.7 UJ | 1 UJ | 3.5 UJ | 2.4 UJ |
| Total Pesticides | | TPEST | **0.84** | **3.637** | **3.43** | **1.89** | ND | ND | **0.035** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 41 UJ | 33 UJ | 25 UJ | 18 UJ | 10 U | 35 UJ | 25 UJ |
| 2,4-D | | 94-75-7 | 0.41 UJ | 0.33 UJ | 0.25 UJ | 0.18 UJ | 0.1 U | 0.35 UJ | 0.25 UJ |
| 2,4-DB | | 94-82-6 | 0.41 UJ | 0.33 UJ | 0.25 UJ | 0.18 UJ | 0.1 U | 0.35 UJ | 0.25 UJ |
| Dicamba | | 1918-00-9 | 0.21 UJ | 0.17 UJ | 0.13 UJ | 0.088 UJ | 0.051 U | 0.18 UJ | 0.12 UJ |
| Dichloroprop | | 120-36-5 | 0.41 UJ | 0.33 UJ | 0.25 UJ | 0.18 UJ | 0.1 U | 0.35 UJ | 0.25 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.46 UJ | 0.37 UJ | 0.28 UJ | 0.2 UJ | 0.11 U | 0.4 UJ | 0.28 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED12 | GPEC-SED13 | GPEC-SED13 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED12(0.66-1.97) | GPECSED12(1.97-3.28) | GPECSED12(3.28-6.56) | GPECSED12(6.56-8.66) | GPECSED12(8.66-11.75NSU) | GPECSED13(0-0.33) | GPECSED13(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.66 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 8.66 | 11.75 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.062 UJ | 0.05 UJ | 0.038 UJ | 0.026 UJ | 0.015 U | 0.053 UJ | 0.038 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 41 UJ | 33 UJ | 25 UJ | 18 UJ | 10 U | 35 UJ | 25 UJ |
| Silvex | | 93-72-1 | 0.1 UJ | 0.083 UJ | 0.063 UJ | 0.044 UJ | 0.026 U | 0.088 UJ | 0.062 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.1 UJ | 0.083 UJ | 0.063 UJ | 0.044 UJ | 0.026 U | 0.088 UJ | 0.062 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | 0.00041 UJ | R | 0.00022 UJ | 0.00013 UJ | 0.00046 UJ | 0.00031 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **20900 J** | **18700 J** | **17200 J** | **8910 J** | **2800** | **17400 J** | **13700 J** |
| Antimony | | 7440-36-0 | **8.1 J** | **8.6 J** | **18.3 J** | **15.4 J** | **0.64** | **4.5 J** | **38.5 J** |
| Arsenic | | 7440-38-2 | **113 J** | **112 J** | **186 J** | **142 J** | **6.8 J** | **49.7 J** | **630 J** |
| Barium | | 7440-39-3 | **289 J** | **248 J** | **349 J** | **209 J** | **22.9 J** | **218 J** | **523 J** |
| Beryllium | | 7440-41-7 | **1.3 J** | **1.2 J** | **1.3 J** | **0.74 J** | **0.16** | **0.94 J** | **1.0 J** |
| Cadmium | | 7440-43-9 | **97.8 J** | **119 J** | **201 J** | **131 J** | **0.33** | **40.9 J** | **33.5 J** |
| Calcium | | 7440-70-2 | **18300 J** | **16400 J** | **17500 J** | **12100 J** | **11700** | **14700 J** | **11700 J** |
| Chromium | | 7440-47-3 | **830 J** | **919 J** | **1640 J** | **901 J** | **13.5** | **374 J** | **400 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **30.5 J** | **31.5 J** | **50.9 J** | **30.7 J** | **4** | **19.9 J** | **25.3 J** |
| Copper | | 7440-50-8 | **5220 J** | **7060 J** | **9760 J** | **5740 J** | **155** | **2870 J** | **10000 J** |
| Iron | | 7439-89-6 | **46900 J** | **42800 J** | **45000 J** | **28400 J** | **11900** | **37400 J** | **45800 J** |
| Lead | | 7439-92-1 | **1420 J** | **1650 J** | **1850 J** | **1110 J** | **34.8** | **878 J** | **1780 J** |
| Magnesium | | 7439-95-4 | **15800 J** | **12100 J** | **9430 J** | **5160 J** | **5580** | **13400 J** | **6630 J** |
| Manganese | | 7439-96-5 | **358 J** | **297 J** | **284 J** | **192 J** | **148 J** | **294 J** | **266 J** |
| Mercury | | 7439-97-6 | **7.28 J** | **8.3 J** | **8.94 J** | **5.71 J** | **0.742** | **2.48 J** | **0.87 J** |
| Nickel | | 7440-02-0 | **908 J** | **1050 J** | **2380 J** | **1880 J** | **33.1** | **439 J** | **1920 J** |
| Potassium | | 7440-09-7 | **4590 J** | **3730 J** | **3290 J** | **1760 J** | **577** | **4340 J** | **2760 J** |
| Selenium | | 7782-49-2 | **10.5 J** | **13.5 J** | **14.7 J** | **8.7 J** | **0.61 J** | **6.6 J** | **26.4 J** |
| Silver | | 7440-22-4 | **29.9 J** | **35.3 J** | **48 J** | **25.3 J** | **0.16 J** | **17.2 J** | **27.2 J** |
| Sodium | | 7440-23-5 | **30500 J** | **23200 J** | **16400 J** | **7270 J** | **179** | **25000 J** | **11500 J** |
| Thallium | | 7440-28-0 | **0.93 J** | **0.93 J** | **0.9 J** | **0.6 J** | **0.084** | **0.79 J** | **2.2 J** |
| Tin | | 7440-31-5 | **105 J** | **114 J** | **138 J** | **93.1 J** | **4** | **63.8 J** | **165 J** |
| Vanadium | | 7440-62-2 | **122 J** | **171 J** | **130 J** | **76 J** | **14** | **84.7 J** | **55.3 J** |
| Zinc | | 7440-66-6 | **5770 J** | **6160 J** | **12500 J** | **7100 J** | **73.5** | **2640 J** | **5620 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 2.6 UJ | **3.7 J** | **13.8 J** | **9.3 J** | 0.64 UJ | 2.3 UJ | **13.4 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1100 J** | **1110 J** | **1580 J** | **1050 J** | **19.9 J** | **596 J** | **2230 J** |
| Black Carbon | | BC | **8050 J** | **9140 J** | **13200 J** | **39300 J** | **21200 J** | **6720 J** | **10500 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.5 J** | **1.4 J** | **1.7 J** | **1.6 J** | **0.36 J** | **1.0 J** | **1.2 J** |
| pH (s.u.) | | pH | **7.6 J** | **7.7 J** | **7.6 J** | **8.0 J** | **8.0 J** | **7.7 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **12600 J** | **12700 J** | **10100 J** | **6260 J** | **439** | **6500 J** | **17400 J** |
| Total Kjeldahl Nitrogen | | TKN | **7510 J** | **7670 J** | **8580 J** | **5920 J** | **1080** | **6200 J** | **8780 J** |
| Total Nitrogen | | 7727-37-9 | **7510 J** | **7670 J** | **8580 J** | **5920 J** | **1080** | **6200 J** | **8780 J** |
| Total Organic Carbon | | TOC | **96600 J** | **113000 J** | **132000 J** | **143000 J** | **54500 J** | **94700 J** | **137000 J** |
| Total Phosphorous | | 7723-14-0 | **4880 J** | 41.4 UJ | **1140 J** | **365 J** | **356 J** | **42.6 J** | **753 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED14 | GPEC-SED14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED13(0.66-1.97) | GPECSED13(1.97-3.28) | GPECSED13(3.28-6) | GPECSED13(6-11.9NSU) | GPECXX062210B | GPECSED14(0-0.33) | GPECSED14(0.33-0.66) |
| | | | Start Depth | 0.66 | 1.97 | 3.28 | 6 | 6 | 0 | 0.33 |
| | | | End Depth | 1.97 | 3.28 | 6 | 11.9 | 11.9 | 0.33 | 0.66 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | | Parent Sample Code | | | | | GPECSED13(6-11.9NSU) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | | |
| Benzene | | 71-43-2 | **0.16 J** | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Toluene | | 108-88-3 | **0.35 J** | **0.17 J** | NA | NA | NA | 1.3 UJ | NA | |
| Ethylbenzene | | 100-41-4 | **1.3 J** | **0.72 J** | NA | NA | NA | **1.1 J** | NA | |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | | 1330-20-7 | **2.8 J** | **1.7 J** | NA | NA | NA | **1.4 J** | NA | |
| Total BTEX | | TBTEX | **4.61** | **2.59** | NA | NA | NA | **2.5** | NA | |
| **Other VOCs** | mg/kg | | | | | | | | | |
| Acetone | | 67-64-1 | 3 UJ | 2.7 UJ | NA | NA | NA | 5.3 UJ | NA | |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA | |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromochloromethane | | 74-97-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Bromodichloromethane | | 75-27-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Bromoform | | 75-25-2 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Bromomethane | | 74-83-9 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 2-Butanone | | 78-93-3 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Carbon disulfide | | 75-15-0 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Carbon tetrachloride | | 56-23-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Chlorobenzene | | 108-90-7 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Chloroethane | | 75-00-3 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Chloroform | | 67-66-3 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Chloromethane | | 74-87-3 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Cyclohexane | | 110-82-7 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Dibromochloromethane | | 124-48-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2-Dibromoethane | | 106-93-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Dichlorodifluoromethane | | 75-71-8 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1-Dichloroethane | | 75-34-3 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2-Dichloroethane | | 107-06-2 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1-Dichloroethene | | 75-35-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2-Dichloropropane | | 78-87-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Hexanone | | 591-78-6 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Isopropyl benzene | | 98-82-8 | **0.25 J** | **0.14 J** | NA | NA | NA | 1.3 UJ | NA | |
| Methyl acetate | | 79-20-9 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Methyl tert-butyl ether | | 1634-04-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Methylcyclohexane | | 108-87-2 | **0.17 J** | **0.14 J** | NA | NA | NA | 1.3 UJ | NA | |
| Methylene chloride | | 75-09-2 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Styrene | | 100-42-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Tetrachloroethene | | 127-18-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Trichloroethene | | 79-01-6 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |
| Trichlorofluoromethane | | 75-69-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA | |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED14 | GPEC-SED14 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED13(0.66-1.97) | GPECSED13(1.97-3.28) | GPECSED13(3.28-6) | GPECSED13(6-11.9NSU) | GPECXX062210B | GPECSED14(0-0.33) | GPECSED14(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6 | 6 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6 | 11.9 | 11.9 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPECSED13(6-11.9NSU) | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA |
| Vinyl chloride | | 75-01-4 | 0.76 UJ | 0.67 UJ | NA | NA | NA | 1.3 UJ | NA |
| Total VOCs | | TVOC | **5.03** | **2.87** | NA | NA | NA | **2.5** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **250 J** | **30 J** | **16** | 2 U | 2 U | **1.6 J** | **3.3 J** |
| Acenaphthylene | | 208-96-8 | **51 J** | **11 J** | **4.9** | 2 U | 2 U | **1.4 J** | **3.2 J** |
| Anthracene | | 120-12-7 | **190 J** | **34 J** | **19** | 2 U | 2 U | **1.9 J** | **4.2 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Fluoranthene | | 206-44-0 | **230 J** | **65 J** | **35** | 2 U | 2 U | **8.4 J** | **17 J** |
| Fluorene | | 86-73-7 | **170 J** | **29 J** | **15** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **810 J** | **76 J** | **36** | 2 U | 2 U | **1.4 J** | 6.7 UJ |
| Naphthalene | | 91-20-3 | **1700 J** | **430 J** | **150** | 2 U | 2 U | **4.3 J** | 6.7 UJ |
| Phenanthrene | | 85-01-8 | **630 J** | **120 J** | **62** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Pyrene | | 129-00-0 | **370 J** | **79 J** | **35** | 2 U | 2 U | **15 J** | **20 J** |
| Benz[a]anthracene | | 56-55-3 | **130 J** | 17 UJ | **15** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Benzo[a]pyrene | | 50-32-8 | **110 J** | 17 UJ | **9.9** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | **100 J** | 17 UJ | **10** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Chrysene | | 218-01-9 | **130 J** | 17 UJ | **15** | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Total PAHs | | TPAH | **4871** | **874** | **422.8** | ND | ND | **34** | **47.7** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **72 J** | **9.4 J** | **4.2 J** | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **21 J** | 170 UJ | 28 U | 20 U | 20 U | **76 J** | **110 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Caprolactam | | 105-60-2 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| Carbazole | | 86-74-8 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 4-Chloroaniline | | 106-47-8 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| 2-Chlorophenol | | 95-57-8 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Dibenzofuran | | 132-64-9 | **35 J** | **11 J** | **5.5 J** | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Diethyl phthalate | | 84-66-2 | 93 UJ | 84 UJ | **4 J** | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Dimethyl phthalate | | 131-11-3 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 480 UJ | 430 UJ | 72 U | 50 UJ | 50 UJ | 210 UJ | 170 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 1,4-Dioxane | | 123-91-1 | 190 UJ | 170 UJ | 28 UJ | 20 U | 20 U | 84 UJ | 67 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Hexachlorobutadiene | | 87-68-3 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED14 | GPEC-SED14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED13(0.66-1.97) | GPECSED13(1.97-3.28) | GPECSED13(3.28-6) | GPECSED13(6-11.9NSU) | GPECXX062210B | GPECSED14(0-0.33) | GPECSED14(0.33-0.66) |
| | | | Start Depth | 0.66 | 1.97 | 3.28 | 6 | 6 | 0 | 0.33 |
| | | | End Depth | 1.97 | 3.28 | 6 | 11.9 | 11.9 | 0.33 | 0.66 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | | Parent Sample Code | | | | | GPECSED13(6-11.9NSU) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Hexachloroethane | | 67-72-1 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Isophorone | | 78-59-1 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | **8 J** |
| 2-Methylphenol | | 95-48-7 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2-Nitroaniline | | 88-74-4 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| 3-Nitroaniline | | 99-09-2 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| 4-Nitroaniline | | 100-01-6 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| Nitrobenzene | | 98-95-3 | 190 UJ | 170 UJ | 28 U | 20 U | 20 U | 84 UJ | 67 UJ |
| 2-Nitrophenol | | 88-75-5 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 4-Nitrophenol | | 100-02-7 | 480 UJ | 430 UJ | 72 U | 50 U | 50 U | 210 UJ | 170 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Pentachlorophenol | | 87-86-5 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Phenol | | 108-95-2 | 19 UJ | 17 UJ | 2.9 U | 2 U | 2 U | 8.5 UJ | 6.7 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 93 UJ | 84 UJ | 14 U | 9.7 U | 9.7 U | 42 UJ | 33 UJ |
| Total SVOCs | | TSVOC | **4999** | **894.4** | **436.5** | ND | ND | **110** | **165.7** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1248 | | 12672-29-6 | **1.1 J** | **0.88 J** | 0.37 U | 0.24 UJ | 0.27 UJ | **2 J** | **2.4 J** |
| Aroclor 1254 | | 11097-69-1 | **1.9 J** | **2 J** | **2.3 J** | 0.24 UJ | 0.27 UJ | **2.8 J** | **3.9 J** |
| Aroclor 1260 | | 11096-82-5 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.61 UJ | 0.54 UJ | 0.37 U | 0.24 UJ | 0.27 UJ | 1 UJ | 0.84 UJ |
| Total PCBs | | 1336-36-3 | **3** | **2.88** | **2.3** | ND | ND | **4.8** | **6.3** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | **260** | NA | NA | NA | **8800 J** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | **90** | NA | NA | NA | **3400 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | **190** | NA | NA | NA | **6900 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | **13 J** | NA | NA | NA | **140 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | **200** | NA | NA | NA | **7100 J** |
| Total HxCDF | | 55684-94-1 | NA | NA | **210** | NA | NA | NA | **4900 J** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | **30 J** | NA | NA | NA | **560 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | 88 U | NA | NA | NA | 190 UJ |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | **56** | NA | NA | NA | **1400 J** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | **35 J** | NA | NA | NA | **1100 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | 88 U | NA | NA | NA | **65 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | 88 U | NA | NA | NA | **150 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | 88 U | NA | NA | NA | **120 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | **16 J** | NA | NA | NA | **180 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | **150 J** | NA | NA | NA | **5100 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | **4300** | NA | NA | NA | **36000 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | **180** | NA | NA | NA | **2900 J** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | **20 J** | NA | NA | NA | **200 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | **25** | NA | NA | NA | **430 J** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | 88 U | NA | NA | NA | **57 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | **15 J** | NA | NA | NA | **320 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | **270** | NA | NA | NA | **2200 J** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | 18 U | NA | NA | NA | **270 J** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | **20** | NA | NA | NA | **140 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | 18 U | NA | NA | NA | **28 J** |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| alpha-bhc | | 319-84-6 | 0.061 UJ | 0.054 UJ | **0.035 J** | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| beta-BHC | | 319-85-7 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED14 | GPEC-SED14 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED13(0.66-1.97) | GPECSED13(1.97-3.28) | GPECSED13(3.28-6) | GPECSED13(6-11.9NSU) | GPECXX062210B | GPECSED14(0-0.33) | GPECSED14(0.33-0.66) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6 | 6 | 0 | 0.33 |
| | | End Depth | 1.97 | 3.28 | 6 | 11.9 | 11.9 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | GPECSED13(6-11.9NSU) | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| delta-BHC | | 319-86-8 | 0.061 UJ | **0.036 J** | **0.034 J** | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| alpha-chlordane | | 5103-71-9 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.061 UJ | 0.054 UJ | **0.046 J** | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.061 UJ | 0.054 UJ | **0.072 JN** | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| o,p'-DDE | | 3424-82-6 | 0.061 UJ | **0.025 J** | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| 4,4'-DDE | | 72-55-9 | **0.06 J** | 0.054 UJ | **0.091 JN** | R | 0.027 UJ | **0.09 J** | **0.095 JN** |
| o,p'-DDT | | 789-02-6 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| 4,4'-DDT | | 50-29-3 | **0.074 J** | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | **0.11 J** | 0.084 UJ |
| Dieldrin | | 60-57-1 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endosulfan I | | 959-98-8 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endosulfan II | | 33213-65-9 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endrin | | 72-20-8 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Endrin ketone | | 53494-70-5 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Heptachlor | | 76-44-8 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | **0.051 J** |
| Hexachlorobenzene | | 118-74-1 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Methoxychlor | | 72-43-5 | 0.12 UJ | 0.11 UJ | 0.074 UJ | R | 0.053 UJ | 0.21 UJ | 0.17 UJ |
| Mirex | | 2385-85-5 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| Mitotane | | 53-19-0 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | **0.13 J** | 0.084 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.061 UJ | 0.054 UJ | 0.037 UJ | R | 0.027 UJ | 0.1 UJ | 0.084 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.4 UJ | 2.2 UJ | 1.5 UJ | R | 1.1 UJ | 4.1 UJ | 3.4 UJ |
| Toxaphene | | 8001-35-2 | 2.4 UJ | 2.2 UJ | 1.5 UJ | R | 1.1 UJ | 4.1 UJ | 3.4 UJ |
| Total Pesticides | | TPEST | **0.134** | **0.061** | **0.278** | ND | ND | **0.33** | **0.146** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | 0.000048 UJ | **0.00035** | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | 0.000048 UJ | **0.00048** | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | **0.00000061 J** | 0.000051 U | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | **0.000019 J** | **0.00048 J** | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | 0.000048 U | **0.000062** | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | 0.000048 UJ | **0.00088 J** | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | 0.000048 UJ | **0.00038 J** | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | 0.000048 UJ | 0.000051 U | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | 0.000048 UJ | 0.000051 U | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | 0.000048 UJ | 0.000051 U | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | 0.000048 UJ | 0.000051 U | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | 0.000048 UJ | 0.000051 UJ | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | 0.000048 U | 0.000051 U | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | **0.000011 J** | **0.00027 J** | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | **0.0000059 J** | **0.000067** | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | 0.000048 U | **0.00011** | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | 0.012 U | 0.013 U | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | **0.00003651** | **0.003079** | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 24 UJ | 22 UJ | 15 U | 9.8 U | 11 U | 42 UJ | 36 UJ |
| 2,4-D | | 94-75-7 | 0.24 UJ | 0.22 UJ | 0.15 U | 0.098 U | 0.11 U | 0.42 UJ | 0.36 UJ |
| 2,4-DB | | 94-82-6 | 0.24 UJ | 0.22 UJ | 0.15 U | 0.098 U | 0.11 U | 0.42 UJ | 0.36 UJ |
| Dicamba | | 1918-00-9 | 0.12 UJ | 0.11 UJ | 0.075 U | 0.049 U | 0.053 U | 0.21 UJ | 0.18 UJ |
| Dichloroprop | | 120-36-5 | 0.24 UJ | 0.22 UJ | 0.15 U | 0.098 U | 0.11 U | 0.42 UJ | 0.36 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.27 UJ | 0.24 UJ | 0.17 U | 0.11 U | 0.12 U | 0.47 UJ | R |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED13 | GPEC-SED14 | GPEC-SED14 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED13(0.66-1.97) | GPECSED13(1.97-3.28) | GPECSED13(3.28-6) | GPECSED13(6-11.9NSU) | GPECXX062210B | GPECSED14(0-0.33) | GPECSED14(0.33-0.66) |
| | | | Start Depth | 0.66 | 1.97 | 3.28 | 6 | 6 | 0 | 0.33 |
| | | | End Depth | 1.97 | 3.28 | 6 | 11.9 | 11.9 | 0.33 | 0.66 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | | Parent Sample Code | | | | | GPECSED13(6-11.9NSU) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Dinoseb | | 88-85-7 | 0.037 UJ | 0.032 UJ | 0.023 U | 0.015 U | 0.016 U | 0.063 UJ | 0.054 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 24 UJ | 22 UJ | 15 U | 9.8 U | 11 U | 42 UJ | 36 UJ |
| Silvex | | 93-72-1 | 0.061 UJ | 0.054 UJ | 0.038 U | 0.025 U | 0.027 U | 0.11 UJ | 0.091 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.061 UJ | 0.054 UJ | 0.038 U | 0.025 U | 0.027 U | 0.11 UJ | 0.091 UJ |
| **Metals** | mg/kg | | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | R | **0.0001 J** | 0.00012 UJ | 0.00013 UJ | 0.00053 UJ | R |
| **Total Metals** | mg/kg | | | | | | | | | |
| Aluminum | | 7429-90-5 | **12400 J** | **12700 J** | **11700** | **5880 J** | **5340 J** | **15500 J** | **17100 J** |
| Antimony | | 7440-36-0 | **33.6 J** | **37.1 J** | **15.2 J** | 0.12 UJ | 0.13 UJ | **3.8 J** | **5.1 J** |
| Arsenic | | 7440-38-2 | **457 J** | **490 J** | **208 J** | **3.6 J** | **6.8 J** | **47.5 J** | **85.2 J** |
| Barium | | 7440-39-3 | **395 J** | **585 J** | **273 J** | **41.6 J** | **38.9 J** | **202 J** | **257 J** |
| Beryllium | | 7440-41-7 | **1.0 J** | **0.84 J** | **0.61** | **0.28 J** | **0.29 J** | **0.94 J** | **0.99 J** |
| Cadmium | | 7440-43-9 | **36.4 J** | **26.0 J** | **8.6 J** | **0.16 J** | **0.098 J** | **36.5 J** | **67.9 J** |
| Calcium | | 7440-70-2 | **12200 J** | **8600 J** | **8450** | **16800 J** | **13200 J** | **14000 J** | **17000 J** |
| Chromium | | 7440-47-3 | **366 J** | **288 J** | **140 J** | **16.4 J** | **15.5 J** | **330 J** | **575 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **29.3 J** | **25.6 J** | **23.1 J** | **6.4 J** | **6.3 J** | **18.5 J** | **25.0 J** |
| Copper | | 7440-50-8 | **11500 J** | **5570 J** | **2180 J** | **32.1 J** | **19.5 J** | **2560 J** | **4570 J** |
| Iron | | 7439-89-6 | **43200 J** | **42800 J** | **26500 J** | **13800 J** | **14200 J** | **36100 J** | **39300 J** |
| Lead | | 7439-92-1 | **1630 J** | **1560 J** | **649 J** | **8.0 J** | **5.2 J** | **811 J** | **1190 J** |
| Magnesium | | 7439-95-4 | **6150 J** | **6060 J** | **6990** | **9010 J** | **8380 J** | **13200 J** | **13600 J** |
| Manganese | | 7439-96-5 | **262 J** | **242 J** | **253 J** | **271 J** | **243 J** | **279 J** | **319 J** |
| Mercury | | 7439-97-6 | **9.99 J** | **8.3 J** | **3.23** | **0.322 J** | **0.0369 J** | **2.62 J** | **4.17 J** |
| Nickel | | 7440-02-0 | **3420 J** | **1850 J** | **663 J** | **17.3 J** | **14.5 J** | **388 J** | **706 J** |
| Potassium | | 7440-09-7 | **2610 J** | **2470 J** | **2360** | **2040 J** | **1820 J** | **4130 J** | **4160 J** |
| Selenium | | 7782-49-2 | **26.5 J** | **36.3 J** | **42.5 J** | **0.52 J** | **0.41 J** | **6.2 J** | **9.4 J** |
| Silver | | 7440-22-4 | **22.1 J** | **22.8 J** | **8.3 J** | **0.043 J** | **0.012 J** | **15.7 J** | **24.2 J** |
| Sodium | | 7440-23-5 | **12100 J** | **8630 J** | **2770** | **261 J** | **212 J** | **27900 J** | **24000 J** |
| Thallium | | 7440-28-0 | **2.4 J** | **2.0 J** | **0.95 J** | **0.19 J** | **0.16 J** | **0.77 J** | **0.94 J** |
| Tin | | 7440-31-5 | **140 J** | **160 J** | **49.2 J** | 0.31 UJ | 0.33 UJ | **57.9 J** | **81.0 J** |
| Vanadium | | 7440-62-2 | **58.0 J** | **50.2 J** | **39.3 J** | **24.5 J** | **26.5 J** | **76.3 J** | **97.8 J** |
| Zinc | | 7440-66-6 | **5530 J** | **4490 J** | **1320 J** | **38.2 J** | **32.7 J** | **2510 J** | **4450 J** |
| **Cyanides** | mg/kg | | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 1.5 UJ | **8.0 J** | **4.0 J** | 0.61 UJ | 0.66 UJ | **0.70 J** | **1.8 J** |
| **Other** | mg/kg | | | | | | | | | |
| Ammonia | | 7664-41-7 | **3020 J** | **2660 J** | **1150** | **90.5** | **119** | **367 J** | **1350 J** |
| Black Carbon | | BC | **42700 J** | **28300 J** | **8790 J** | **7500 J** | **9590 J** | **7530 J** | **6360 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.54 J** | **0.42 J** | **0.19 J** | **0.36 J** | **0.44 J** | 5.3 UJ | **2.3 J** |
| pH (s.u.) | | pH | **7.8 J** | **7.8 J** | **7.9 J** | **8.4 J** | **8.0 J** | **7.6 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **11500 J** | **9130 J** | **1710 J** | **63.8 J** | **101 J** | **11400 J** | **9420 J** |
| Total Kjeldahl Nitrogen | | TKN | **10800 J** | **8390 J** | **2320** | **1100 J** | **410 J** | **6800 J** | **6490 J** |
| Total Nitrogen | | 7727-37-9 | **10800 J** | **8390 J** | **2320** | **1100 J** | **410 J** | **6800 J** | **6490 J** |
| Total Organic Carbon | | TOC | **220000 J** | **148000 J** | **28200 J** | **8050 J** | **11400 J** | **87900 J** | **96500 J** |
| Total Phosphorous | | 7723-14-0 | **146 J** | **963 J** | **9.7 J** | **415 J** | **16.8 J** | **184 J** | **620 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED15 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED14(0.66-1.97) | GPECSED14(1.97-3.28) | GPECSED14(3.28-6.56) | GPECXX062210 | GPECSED14(6.56-8.25) | GPECSED14(8.25-12.7NSU) | GPECSED15(0-0.33) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 3.28 | 6.56 | 8.25 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 6.56 | 8.25 | 12.7 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | GPECSED14(3.28-6.56) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | NA | **3.9 J** | **8** | **1.4 J** |
| Toluene | | 108-88-3 | NA | NA | NA | NA | **0.33 J** | **0.52 J** | **0.53 J** |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | NA | **11 J** | **66** | **3.4 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | NA | **14** | **66** | **3.8 J** |
| Total BTEX | | TBTEX | NA | NA | NA | NA | **29.23** | **140.52** | **9.13** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | NA | 2.3 UJ | 12 U | 5.3 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Bromoform | | 75-25-2 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Bromomethane | | 74-83-9 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | NA | **0.073 J** | 3 U | 1.3 UJ |
| Chloroethane | | 75-00-3 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Chloroform | | 67-66-3 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Chloromethane | | 74-87-3 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | **0.091 J** | 3 U | 1.3 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | **1.2 J** | **7.1** | **0.42 J** |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | 0.58 UJ | 3 UJ | 1.3 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | **0.44 J** | **0.42 J** | 1.3 UJ |
| Methylene chloride | | 75-09-2 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Styrene | | 100-42-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | 0.58 UJ | 3 UJ | 1.3 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Trichloroethene | | 79-01-6 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED15 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED14(0.66-1.97) | GPECSED14(1.97-3.28) | GPECSED14(3.28-6.56) | GPECXX062210 | GPECSED14(6.56-8.25) | GPECSED14(8.25-12.7NSU) | GPECSED15(0-0.33) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 3.28 | 6.56 | 8.25 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 6.56 | 8.25 | 12.7 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | GPECSED14(3.28-6.56) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | NA | 0.58 UJ | 3 U | 1.3 UJ |
| Total VOCs | | TVOC | NA | NA | NA | NA | **31.034** | **148.04** | **9.55** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **8.2 J** | **8.4 J** | **45 J** | **27 J** | **580 J** | **410** | **35 J** |
| Acenaphthylene | | 208-96-8 | 6.3 UJ | **4.5 J** | **16 J** | **23 J** | **64 J** | **52** | **10 J** |
| Anthracene | | 120-12-7 | **9.3 J** | **9.1 J** | **44 J** | **36 J** | **310 J** | **200** | **26 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Fluoranthene | | 206-44-0 | **26 J** | **23 J** | **75 J** | **78 J** | **310 J** | **190** | **38 J** |
| Fluorene | | 86-73-7 | **2.8 J** | **2.9 J** | **33 J** | **20 J** | **290 J** | **200** | **8.3 J** |
| 2-Methylnaphthalene | | 91-57-6 | **3.3 J** | **3.5 J** | **77 J** | **20 J** | **1500 J** | **1200** | **4.4 J** |
| Naphthalene | | 91-20-3 | **10 J** | **10 J** | **190 J** | **48 J** | **4000** | **1700** | **60 J** |
| Phenanthrene | | 85-01-8 | 6.3 UJ | 5.6 UJ | **140 J** | **99 J** | **1100 J** | **720** | **54 J** |
| Pyrene | | 129-00-0 | **32 J** | **29 J** | **92 J** | **97 J** | **560 J** | **380** | **76 J** |
| Benz[a]anthracene | | 56-55-3 | 6.3 UJ | 5.6 UJ | **39 J** | **52 J** | **180 J** | **96** | 17 UJ |
| Benzo[a]pyrene | | 50-32-8 | 6.3 UJ | 5.6 UJ | **29 J** | **44 J** | **150 J** | **87** | 17 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | 6.3 UJ | 5.6 UJ | **28 J** | **40 J** | **130 J** | **66** | 17 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Chrysene | | 218-01-9 | 6.3 UJ | 5.6 UJ | **40 J** | **54 J** | **170 J** | **82** | 17 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Total PAHs | | TPAH | **91.6** | **90.4** | **848** | **638** | **9344** | **5383** | **311.7** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 31 UJ | 27 UJ | **8.5 J** | **4.1 J** | **140 J** | **110** | 85 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 U | 7.2 U | 17 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **280 J** | **320 J** | **350 J** | **370 J** | **82 J** | 71 U | **86 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Caprolactam | | 105-60-2 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| Carbazole | | 86-74-8 | 6.3 UJ | 5.6 UJ | **2.2 J** | 4.4 UJ | **10 J** | **2.9 J** | 17 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 4-Chloroaniline | | 106-47-8 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| 2-Chlorophenol | | 95-57-8 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Dibenzofuran | | 132-64-9 | 31 UJ | 27 UJ | **7.2 J** | **4.8 J** | **65 J** | **44** | 85 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Diethyl phthalate | | 84-66-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Dimethyl phthalate | | 131-11-3 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 31 UJ | 27 UJ | **5 J** | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 UJ | 440 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 1,4-Dioxane | | 123-91-1 | 63 UJ | 55 UJ | 45 UJ | 44 UJ | 140 UJ | 71 U | 170 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 31 UJ | 27 UJ | **4.9 J** | **3.9 J** | 72 UJ | 35 U | 85 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Hexachlorobutadiene | | 87-68-3 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED15 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED14(0.66-1.97) | GPECSED14(1.97-3.28) | GPECSED14(3.28-6.56) | GPECXX062210 | GPECSED14(6.56-8.25) | GPECSED14(8.25-12.7NSU) | GPECSED15(0-0.33) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 3.28 | 6.56 | 8.25 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 6.56 | 8.25 | 12.7 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | GPECSED14(3.28-6.56) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Hexachloroethane | | 67-72-1 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Isophorone | | 78-59-1 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2-Methylphenol | | 95-48-7 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2-Nitroaniline | | 88-74-4 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| 3-Nitroaniline | | 99-09-2 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| 4-Nitroaniline | | 100-01-6 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| Nitrobenzene | | 98-95-3 | 63 UJ | 55 UJ | 45 UJ | 44 UJ | 140 UJ | 71 U | 170 UJ |
| 2-Nitrophenol | | 88-75-5 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 4-Nitrophenol | | 100-02-7 | 160 UJ | 140 UJ | 120 UJ | 110 UJ | 370 UJ | 180 U | 440 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Pentachlorophenol | | 87-86-5 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Phenol | | 108-95-2 | 6.3 UJ | 5.6 UJ | 4.5 UJ | 4.4 UJ | 15 UJ | 7.2 U | 17 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 31 UJ | 27 UJ | 22 UJ | 22 UJ | 72 UJ | 35 U | 85 UJ |
| Total SVOCs | | TSVOC | **371.6** | **410.4** | **1225.8** | **1020.8** | **9641** | **5539.9** | **397.7** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1248 | | 12672-29-6 | **3.8 J** | **3.9 J** | **8.5 J** | **5.9 J** | **4.3 J** | 0.24 U | **33 J** |
| Aroclor 1254 | | 11097-69-1 | **5.3 J** | **5.4 J** | **9.7 J** | **8 J** | **5.1 J** | **0.17 J** | **15 J** |
| Aroclor 1260 | | 11096-82-5 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.78 UJ | 0.69 UJ | 0.53 UJ | 0.55 UJ | 0.43 UJ | 0.24 U | 1.1 UJ |
| Total PCBs | | 1336-36-3 | **9.1** | **9.3** | **18.2** | **13.9** | **9.4** | **0.17** | **48** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | **14000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | **4900 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | **12000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | **300 J** | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | **9700 J** | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | **8800 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | **1000 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | **25 J** | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | **1900 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | **2100 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | **77 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | **210 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | **140 J** | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | **320 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | **9100 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | **70000 J** | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | **5200 J** | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | **340 J** | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | **770 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | **79 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | **570 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | **3400 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | **490 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | **210 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | **50 J** | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.078 UJ | **0.095 JN** | **0.17 JN** | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| alpha-bhc | | 319-84-6 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | **0.078 JN** | 0.024 U | 0.11 UJ |
| beta-BHC | | 319-85-7 | 0.078 UJ | **0.11 JN** | **0.27 J** | 0.055 UJ | **0.36 J** | 0.024 U | 0.11 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED15 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED14(0.66-1.97) | GPECSED14(1.97-3.28) | GPECSED14(3.28-6.56) | GPECXX062210 | GPECSED14(6.56-8.25) | GPECSED14(8.25-12.7NSU) | GPECSED15(0-0.33) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 3.28 | 6.56 | 8.25 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 6.56 | 8.25 | 12.7 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | GPECSED14(3.28-6.56) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| delta-BHC | | 319-86-8 | 0.078 UJ | **0.056 J** | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| alpha-chlordane | | 5103-71-9 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | **0.09 J** |
| gamma-Chlordane | | 5103-74-2 | 0.078 UJ | 0.069 UJ | **0.24 JN** | **0.17 JN** | **0.16 JN** | 0.024 U | 0.11 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | **0.013 J** | 0.11 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.14 JN** | **0.11 JN** | **0.26 JN** | **0.14 JN** | **0.12 JN** | 0.024 U | 0.11 UJ |
| o,p'-DDE | | 3424-82-6 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| 4,4'-DDE | | 72-55-9 | **0.13 JN** | **0.12 JN** | **0.23 JN** | **0.16 JN** | **0.17 JN** | 0.024 U | 0.11 UJ |
| o,p'-DDT | | 789-02-6 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| 4,4'-DDT | | 50-29-3 | **0.31 J** | **0.33 J** | **0.46 J** | **0.34 J** | **0.33 J** | 0.024 U | 0.11 UJ |
| Dieldrin | | 60-57-1 | 0.078 UJ | **0.075 JN** | **0.14 JN** | **0.082 JN** | **0.07 JN** | 0.024 U | 0.11 UJ |
| Endosulfan I | | 959-98-8 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| Endosulfan II | | 33213-65-9 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.078 UJ | 0.069 UJ | 0.053 UJ | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| Endrin | | 72-20-8 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| Endrin ketone | | 53494-70-5 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | **0.14 JN** |
| Heptachlor | | 76-44-8 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | **0.058 JN** | 0.024 U | 0.11 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.078 UJ | **0.075 JN** | **0.18 JN** | **0.1 JN** | **0.12 J** | 0.024 U | 0.11 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.078 UJ | 0.069 UJ | 0.053 UJ | 0.055 UJ | 0.043 UJ | 0.024 UJ | 0.11 UJ |
| Methoxychlor | | 72-43-5 | **0.16 JN** | 0.14 UJ | 0.11 U | 0.11 UJ | 0.085 UJ | 0.048 U | 0.21 UJ |
| Mirex | | 2385-85-5 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | **0.053 J** | 0.024 U | 0.11 UJ |
| Mitotane | | 53-19-0 | 0.078 UJ | 0.069 UJ | 0.053 U | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.078 UJ | 0.069 UJ | 0.053 UJ | 0.055 UJ | 0.043 UJ | 0.024 U | 0.11 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.1 UJ | 2.8 UJ | 2.1 U | 2.2 UJ | 1.7 UJ | 0.96 U | 4.3 UJ |
| Toxaphene | | 8001-35-2 | 3.1 UJ | 2.8 UJ | 2.1 U | 2.2 UJ | 1.7 UJ | 0.96 U | 4.3 UJ |
| Total Pesticides | | TPEST | **0.74** | **0.971** | **1.95** | **0.992** | **1.519** | **0.013** | **0.23** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 31 UJ | 28 UJ | 23 UJ | 23 UJ | 18 UJ | 9.4 U | 43 UJ |
| 2,4-D | | 94-75-7 | 0.31 UJ | 0.28 UJ | 0.23 UJ | **0.023 J** | 0.18 UJ | 0.094 U | 0.43 UJ |
| 2,4-DB | | 94-82-6 | 0.31 U | 0.28 UJ | 0.23 UJ | 0.23 UJ | 0.18 UJ | 0.094 U | 0.43 UJ |
| Dicamba | | 1918-00-9 | **0.047 J** | **0.017 J** | 0.11 UJ | 0.11 UJ | 0.092 UJ | 0.047 U | 0.21 UJ |
| Dichloroprop | | 120-36-5 | 0.31 UJ | 0.28 UJ | 0.23 UJ | 0.23 UJ | 0.18 UJ | 0.094 U | 0.43 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.35 UJ | 0.31 UJ | **0.84 J** | 0.25 UJ | **0.56 J** | 0.11 U | 0.48 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED14 | GPEC-SED15 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED14(0.66-1.97) | GPECSED14(1.97-3.28) | GPECSED14(3.28-6.56) | GPECXX062210 | GPECSED14(6.56-8.25) | GPECSED14(8.25-12.7NSU) | GPECSED15(0-0.33) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 3.28 | 6.56 | 8.25 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 6.56 | 8.25 | 12.7 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | GPECSED14(3.28-6.56) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.047 UJ | 0.042 UJ | 0.034 UJ | 0.034 UJ | 0.028 UJ | 0.014 U | 0.064 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 31 UJ | 28 UJ | 23 UJ | 23 UJ | 18 UJ | 9.4 U | 43 UJ |
| Silvex | | 93-72-1 | 0.078 UJ | 0.069 UJ | 0.056 UJ | 0.056 UJ | 0.046 UJ | 0.024 U | 0.11 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.078 UJ | 0.069 UJ | **0.013 J** | 0.056 UJ | 0.046 UJ | 0.024 U | 0.11 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00039 UJ | R | R | 0.00029 UJ | R | 0.00012 UJ | R |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **15200 J** | **17700 J** | **16800 J** | **18100 J** | **9750 J** | **2810** | **17200 J** |
| Antimony | | 7440-36-0 | **7.0 J** | **7.8 J** | **10.5 J** | **10.7 J** | **20.9 J** | **0.36 J** | **11.6 J** |
| Arsenic | | 7440-38-2 | **107 J** | **129 J** | **140 J** | **143 J** | **189 J** | **10.7 J** | **109 J** |
| Barium | | 7440-39-3 | **247 J** | **258 J** | **282 J** | **266 J** | **262 J** | **170 J** | **267 J** |
| Beryllium | | 7440-41-7 | **0.95 J** | **1.1 J** | **1.2 J** | **1.2 J** | **0.74 J** | **0.13** | **1.1 J** |
| Cadmium | | 7440-43-9 | **92.7 J** | **111 J** | **155 J** | **140 J** | **80.5 J** | **0.17 J** | **89.5 J** |
| Calcium | | 7440-70-2 | **15100 J** | **16700 J** | **16300 J** | **16600 J** | **10400 J** | **5080** | **17700 J** |
| Chromium | | 7440-47-3 | **784 J** | **927 J** | **1250 J** | **1120 J** | **721 J** | **15.8 J** | **759 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **29.8 J** | **33.5 J** | **42.0 J** | **39.6 J** | **29.8 J** | **3.0 J** | **29.4 J** |
| Copper | | 7440-50-8 | **5330 J** | **6270 J** | **8330 J** | **8220 J** | **5980 J** | **54.6 J** | **5390 J** |
| Iron | | 7439-89-6 | **37700 J** | **42600 J** | **40200 J** | **40800 J** | **27100 J** | **6760 J** | **41100 J** |
| Lead | | 7439-92-1 | **1390 J** | **1580 J** | **1940 J** | **1820 J** | **1120 J** | **61.7 J** | **1210 J** |
| Magnesium | | 7439-95-4 | **11100 J** | **12100 J** | **9200 J** | **9750 J** | **4490 J** | **3090** | **10600 J** |
| Manganese | | 7439-96-5 | **281 J** | **330 J** | **298 J** | **296 J** | **188 J** | **78.1 J** | **318 J** |
| Mercury | | 7439-97-6 | **5.26 J** | **6.77 J** | **7.78 J** | **5.04 J** | **5.21 J** | **0.115** | **4.39 J** |
| Nickel | | 7440-02-0 | **947 J** | **1180 J** | **1530 J** | **1490 J** | **1720 J** | **11.3 J** | **1150 J** |
| Potassium | | 7440-09-7 | **3230 J** | **3370 J** | **2960 J** | **3090 J** | **1850 J** | **674** | **3500 J** |
| Selenium | | 7782-49-2 | **11.0 J** | **12.8 J** | **13.8 J** | **14.6 J** | **25.4 J** | **1.6 J** | **9.5 J** |
| Silver | | 7440-22-4 | **28.9 J** | **34.4 J** | **43.0 J** | **39.0 J** | **22.1 J** | **0.11 J** | **27 J** |
| Sodium | | 7440-23-5 | **19100 J** | **16600 J** | **10100 J** | **10000 J** | **3360 J** | **223** | **8860 J** |
| Thallium | | 7440-28-0 | **0.82 J** | **0.86 J** | **0.87 J** | **0.90 J** | **1.1 J** | **0.12 J** | **1 J** |
| Tin | | 7440-31-5 | **90.2 J** | **107 J** | **113 J** | **115 J** | **87.4 J** | **1.8 J** | **96.1 J** |
| Vanadium | | 7440-62-2 | **107 J** | **132 J** | **133 J** | **156 J** | **69.9 J** | **10.6 J** | **102 J** |
| Zinc | | 7440-66-6 | **5410 J** | **6360 J** | **9230 J** | **7270 J** | **5470 J** | **36.5 J** | **6000 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.3 J** | **3.6 J** | **5.7 J** | **6.1 J** | **4.9 J** | 0.60 UJ | **0.81 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1310 J** | **1680 J** | **3200 J** | **2520 J** | **1550 J** | **112** | **390 J** |
| Black Carbon | | BC | **7400 J** | **8140 J** | **9690 J** | **12100 J** | **19100 J** | **6690 J** | **25300 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **2.9 J** | **2.6 J** | **2.7 J** | **1.1 J** | **1.3 J** | **1.0 J** | **1.9 J** |
| pH (s.u.) | | pH | **7.8 J** | **7.8 J** | **7.8 J** | **7.7 J** | **8.0 J** | **8.4 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **12000 J** | **12000 J** | **8260 J** | **13900 J** | **10600 J** | **106 J** | **5890 J** |
| Total Kjeldahl Nitrogen | | TKN | **5950 J** | **7500 J** | **7450 J** | **7120 J** | **6360 J** | **406** | **7350 J** |
| Total Nitrogen | | 7727-37-9 | **5950 J** | **7500 J** | **7450 J** | **7120 J** | **6360 J** | **407** | **7350 J** |
| Total Organic Carbon | | TOC | **104000 J** | **114000 J** | **142000 J** | **142000 J** | **162000 J** | **12400 J** | **118000 J** |
| Total Phosphorous | | 7723-14-0 | **819 J** | **1750 J** | **99.6 J** | **2880 J** | **204 J** | **174 J** | **51.2 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED16 | GPEC-SED16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED15(0.33-0.66) | GPECSED15(0.66-1.97) | GPECSED15(1.97-3.28) | GPECSED15(3.28-4.6) | GPECSED15(4.6-9.58)NSU | GPECSED16(0-0.33) | GPECSED16(0.33-0.66) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 4.6 | 0 | 0.33 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.6 | 9.58 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | **0.76 J** | 0.32 UJ | **0.54 J** | **0.36 J** |
| Toluene | | 108-88-3 | NA | NA | NA | **0.44 J** | 0.32 UJ | **1.3 J** | **0.22 J** |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | **10 J** | **1.3 J** | **1.7 J** | **3.9 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | **8.3 J** | **1.4 J** | **1.8 J** | **6.6 J** |
| Total BTEX | | TBTEX | NA | NA | NA | **19.5** | **2.7** | **5.34** | **11.08** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | 2.3 UJ | 1.3 UJ | 4.2 UJ | 2.9 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Bromoform | | 75-25-2 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Bromomethane | | 74-83-9 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | 0.57 UJ | 0.32 U | 1.1 UJ | 0.72 UJ |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | **0.081 J** |
| Chloroethane | | 75-00-3 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Chloroform | | 67-66-3 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Chloromethane | | 74-87-3 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | **0.94 J** | **0.49 J** | **0.15 J** | **0.51 J** |
| Methyl acetate | | 79-20-9 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | **0.18 J** | 0.32 UJ | 1.1 UJ | **0.6 J** |
| Methylene chloride | | 75-09-2 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Styrene | | 100-42-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | 0.57 UJ | **0.047 J** | 1.1 UJ | 0.72 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Trichloroethene | | 79-01-6 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |

| | | Location Name | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED16 | GPEC-SED16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED15(0.33-0.66) | GPECSED15(0.66-1.97) | GPECSED15(1.97-3.28) | GPECSED15(3.28-4.6) | GPECSED15(4.6-9.58)NSU | GPECSED16(0-0.33) | GPECSED16(0.33-0.66) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 4.6 | 0 | 0.33 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.6 | 9.58 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | 0.57 UJ | 0.32 UJ | 1.1 UJ | 0.72 UJ |
| Total VOCs | | TVOC | NA | NA | NA | **20.62** | **3.237** | **5.49** | **12.271** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **20 J** | **28 J** | **53 J** | **1100 J** | **200** | **3.6 J** | **75 J** |
| Acenaphthylene | | 208-96-8 | **6.5 J** | **7.8 J** | **9.4 J** | **130 J** | **43** | **2.2 J** | **11 J** |
| Anthracene | | 120-12-7 | **18 J** | **21 J** | **33 J** | **450 J** | **160** | **5.3 J** | **53 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Fluoranthene | | 206-44-0 | **29 J** | **34 J** | **44 J** | **430 J** | **150** | **16 J** | **62 J** |
| Fluorene | | 86-73-7 | 8.2 UJ | **9.7 J** | **27 J** | **500 J** | **130** | 13 UJ | **49 J** |
| 2-Methylnaphthalene | | 91-57-6 | **3.3 J** | **7.4 J** | **95 J** | **1300 J** | **26** | **1.7 J** | **190 J** |
| Naphthalene | | 91-20-3 | **17 J** | **52 J** | **860 J** | **42000** | **270** | **3.9 J** | **460 J** |
| Phenanthrene | | 85-01-8 | 8.2 UJ | **62 J** | **110 J** | **1500 J** | **550** | 13 UJ | **190 J** |
| Pyrene | | 129-00-0 | 8.2 UJ | **65 J** | **78 J** | **860 J** | **310** | **29 J** | **140 J** |
| Benz[a]anthracene | | 56-55-3 | 8.2 UJ | **26 J** | **31 J** | **310 J** | **100** | 13 UJ | 18 UJ |
| Benzo[a]pyrene | | 50-32-8 | 8.2 UJ | **20 J** | **24 J** | **210 J** | **82** | 13 UJ | 18 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | 8.2 UJ | **18 J** | **21 J** | **210 J** | **67** | 13 UJ | 18 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Chrysene | | 218-01-9 | 8.2 UJ | 6.2 UJ | **34 J** | **340 J** | **93** | 13 UJ | 18 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Total PAHs | | TPAH | **93.8** | **350.9** | **1419.4** | **49340** | **2181** | **61.7** | **1230** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 41 UJ | 31 UJ | 25 U | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 41 UJ | 31 UJ | 25 UJ | **260 J** | **31 J** | 62 UJ | **21 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **140 J** | **220 J** | **290 J** | 690 UJ | 100 U | **160 J** | **110 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Caprolactam | | 105-60-2 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| Carbazole | | 86-74-8 | 8.2 UJ | 6.2 UJ | **2.8 J** | **20 J** | 10 U | 13 UJ | 18 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 4-Chloroaniline | | 106-47-8 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| 2-Chlorophenol | | 95-57-8 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Dibenzofuran | | 132-64-9 | 41 UJ | 31 UJ | **7.2 J** | **170 J** | **18 J** | 62 UJ | 91 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Diethyl phthalate | | 84-66-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Dimethyl phthalate | | 131-11-3 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 1,4-Dioxane | | 123-91-1 | 82 UJ | 62 UJ | 51 UJ | 690 UJ | 100 U | 130 UJ | 180 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Hexachlorobutadiene | | 87-68-3 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Location Name** | **GPEC-SED15** | **GPEC-SED15** | **GPEC-SED15** | **GPEC-SED15** | **GPEC-SED15** | **GPEC-SED16** | **GPEC-SED16** |
| | | **Sample Name** | **GPECSED15(0.33-0.66)** | **GPECSED15(0.66-1.97)** | **GPECSED15(1.97-3.28)** | **GPECSED15(3.28-4.6)** | **GPECSED15(4.6-9.58)NSU** | **GPECSED16(0-0.33)** | **GPECSED16(0.33-0.66)** |
| | | **Start Depth** | **0.33** | **0.66** | **1.97** | **3.28** | **4.6** | **0** | **0.33** |
| | | **End Depth** | **0.66** | **1.97** | **3.28** | **4.6** | **9.58** | **0.33** | **0.66** |
| | | **Depth Unit** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| | | **Sample Date** | **6/22/2010** | **6/22/2010** | **6/22/2010** | **6/22/2010** | **6/22/2010** | **6/22/2010** | **6/22/2010** |
| | | **Parent Sample Code** | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Hexachloroethane | | 67-72-1 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Isophorone | | 78-59-1 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2-Methylphenol | | 95-48-7 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2-Nitroaniline | | 88-74-4 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| 3-Nitroaniline | | 99-09-2 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| 4-Nitroaniline | | 100-01-6 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| Nitrobenzene | | 98-95-3 | 82 UJ | 62 UJ | 51 UJ | 690 UJ | 100 U | 130 UJ | 180 UJ |
| 2-Nitrophenol | | 88-75-5 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 4-Nitrophenol | | 100-02-7 | 210 UJ | 160 UJ | 130 UJ | 1800 UJ | 250 U | 320 UJ | 470 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Pentachlorophenol | | 87-86-5 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Phenol | | 108-95-2 | 8.2 UJ | 6.2 UJ | 5.2 UJ | 69 UJ | 10 U | 13 UJ | 18 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 41 UJ | 31 UJ | 25 UJ | 340 UJ | 49 U | 62 UJ | 91 UJ |
| Total SVOCs | | TSVOC | **233.8** | **570.9** | **1719.4** | **49790** | **2230** | **221.7** | **1361** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1248 | | 12672-29-6 | **36 J** | **41 J** | **47 J** | **6.3 J** | **0.42 J** | **8 J** | **12 J** |
| Aroclor 1254 | | 11097-69-1 | **22 J** | **21 J** | **23 J** | **3.2 J** | **0.26 J** | **7.9 J** | **14 J** |
| Aroclor 1260 | | 11096-82-5 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.98 UJ | 0.82 UJ | 0.64 UJ | 0.46 UJ | 0.24 U | 0.85 UJ | 0.57 UJ |
| Total PCBs | | 1336-36-3 | **58** | **62** | **70** | **9.5** | **0.68** | **15.9** | **26** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **14000 J** | **16000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **4700 J** | **5500 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **12000 J** | **13000 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **260 J** | **280 J** | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **8900 J** | **10000 J** | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | **8200 J** | **9600 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **1000 J** | **1100 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | **18 J** | **18 J** | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **1800 J** | **2500 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **1600 J** | **1900 J** | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **68 J** | **110 J** | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **200 J** | **240 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **130 J** | **170 J** | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **280 J** | **370 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **7600 J** | **8500 J** | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **45000 J** | **44000 J** | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **3900 J** | **5200 J** | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **250 J** | **320 J** | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **610 J** | **930 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **75 J** | **80 J** | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **450 J** | **530 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **3300 J** | **3600 J** | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **360 J** | **500 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **200 J** | **210 J** | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **44 J** | **40 J** | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | **0.21 J** | **0.13 JN** | **0.22 J** | 0.046 UJ | 0.025 UJ | 0.085 UJ | **0.31 J** |
| alpha-bhc | | 319-84-6 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| beta-BHC | | 319-85-7 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |

| | | Location Name | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED16 | GPEC-SED16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED15(0.33-0.66) | GPECSED15(0.66-1.97) | GPECSED15(1.97-3.28) | GPECSED15(3.28-4.6) | GPECSED15(4.6-9.58)NSU | GPECSED16(0-0.33) | GPECSED16(0.33-0.66) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 4.6 | 0 | 0.33 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.6 | 9.58 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | **0.072 J** | 0.082 UJ | 0.064 UJ | **0.055 JN** | 0.025 U | 0.085 UJ | 0.057 UJ |
| delta-BHC | | 319-86-8 | **0.1 JN** | 0.082 UJ | **0.093 JN** | 0.046 UJ | 0.025 U | 0.085 UJ | **0.18 J** |
| alpha-chlordane | | 5103-71-9 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | **0.3 J** | **0.049 J** | 0.085 UJ | **0.22 JN** |
| o,p'-DDE | | 3424-82-6 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| 4,4'-DDE | | 72-55-9 | **0.11 JN** | **0.12 JN** | **0.18 JN** | 0.046 UJ | 0.025 U | 0.085 UJ | **0.42 JN** |
| o,p'-DDT | | 789-02-6 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| 4,4'-DDT | | 50-29-3 | 0.099 UJ | **0.35 J** | **0.33 J** | 0.046 UJ | 0.025 U | 0.085 UJ | **0.78 J** |
| Dieldrin | | 60-57-1 | **0.12 J** | **0.097 JN** | **0.092 JN** | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Endosulfan I | | 959-98-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Endosulfan II | | 33213-65-9 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | **0.33 J** | 0.025 U | 0.085 UJ | **0.078 JN** |
| Endrin | | 72-20-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Endrin ketone | | 53494-70-5 | **0.22 J** | **0.26 J** | **0.24 J** | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Heptachlor | | 76-44-8 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | **0.062 J** | 0.057 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | **0.064 JN** | 0.085 UJ | **0.11 JN** |
| Hexachlorobenzene | | 118-74-1 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Methoxychlor | | 72-43-5 | 0.2 UJ | **0.22 JN** | **0.15 JN** | **0.19 J** | 0.05 U | 0.17 UJ | 0.11 UJ |
| Mirex | | 2385-85-5 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| Mitotane | | 53-19-0 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | **0.97 J** |
| cis-Nonachlor | | 5103-73-1 | 0.099 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | **0.076 JN** |
| trans-Nonachlor | | 39765-80-5 | 3.9 UJ | 3.3 UJ | 2.6 UJ | 1.8 UJ | 1 U | 3.4 UJ | **0.43 J** |
| Toxaphene | | 8001-35-2 | 3.9 UJ | 3.3 UJ | 2.6 UJ | 1.8 UJ | 1 U | 3.4 UJ | 2.3 UJ |
| Total Pesticides | | TPEST | **0.832** | **1.177** | **1.305** | **0.875** | **0.113** | **0.062** | **3.574** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 41 UJ | 33 UJ | 26 UJ | 18 UJ | 10 U | 34 UJ | 23 UJ |
| 2,4-D | | 94-75-7 | 0.41 UJ | 0.33 UJ | 0.26 UJ | 0.18 UJ | 0.1 U | 0.34 UJ | 0.23 UJ |
| 2,4-DB | | 94-82-6 | 0.41 UJ | 0.33 UJ | 0.26 UJ | 0.18 UJ | 0.1 U | 0.34 UJ | 0.23 UJ |
| Dicamba | | 1918-00-9 | 0.2 UJ | 0.16 UJ | 0.13 UJ | 0.091 UJ | 0.05 U | 0.17 UJ | 0.11 UJ |
| Dichloroprop | | 120-36-5 | 0.41 UJ | 0.33 UJ | 0.26 UJ | 0.18 UJ | 0.1 U | 0.34 UJ | 0.23 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.46 UJ | 0.37 UJ | 0.29 UJ | 0.21 UJ | 0.11 U | 0.38 UJ | 0.26 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED15 | GPEC-SED16 | GPEC-SED16 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED15(0.33-0.66) | GPECSED15(0.66-1.97) | GPECSED15(1.97-3.28) | GPECSED15(3.28-4.6) | GPECSED15(4.6-9.58)NSU | GPECSED16(0-0.33) | GPECSED16(0.33-0.66) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 4.6 | 0 | 0.33 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.6 | 9.58 | 0.33 | 0.66 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.061 UJ | 0.049 UJ | 0.039 UJ | 0.027 UJ | 0.015 U | 0.051 UJ | 0.034 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 41 UJ | 33 UJ | 26 UJ | 18 UJ | 10 U | 34 UJ | **9.9 J** |
| Silvex | | 93-72-1 | 0.1 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.1 UJ | 0.082 UJ | 0.064 UJ | 0.046 UJ | 0.025 U | 0.085 UJ | 0.057 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | R | 0.00032 UJ | 0.00023 UJ | 0.00013 UJ | 0.00042 UJ | R |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **18200 J** | **18700 J** | **14900 J** | **6240 J** | **4550** | **17900 J** | **13900 J** |
| Antimony | | 7440-36-0 | **11 J** | **12.7 J** | **14.1 J** | **17.6 J** | **0.22** | **10.3 J** | **22.5 J** |
| Arsenic | | 7440-38-2 | **113 J** | **124 J** | **119 J** | **199 J** | **13.7 J** | **121 J** | **236 J** |
| Barium | | 7440-39-3 | **285 J** | **273 J** | **235 J** | **190 J** | **37.6 J** | **287 J** | **373 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1.2 J** | **1.1 J** | **0.74 J** | **0.24** | **1.2 J** | **1.1 J** |
| Cadmium | | 7440-43-9 | **95.1 J** | **109 J** | **116 J** | **16.9 J** | **0.56** | **127 J** | **304 J** |
| Calcium | | 7440-70-2 | **19000 J** | **18900 J** | **15800 J** | **7440 J** | **16700** | **17300 J** | **16300 J** |
| Chromium | | 7440-47-3 | **778 J** | **891 J** | **893 J** | **175 J** | **17.3** | **1010 J** | **1910 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **30.2 J** | **32.3 J** | **32.1 J** | **14.9 J** | **4.8** | **39.2 J** | **66.1 J** |
| Copper | | 7440-50-8 | **5770 J** | **5960 J** | **7010 J** | **5200 J** | **54.2** | **7350 J** | **10100 J** |
| Iron | | 7439-89-6 | **44000 J** | **43100 J** | **35700 J** | **21900 J** | **11600** | **40600 J** | **40900 J** |
| Lead | | 7439-92-1 | **1300 J** | **1410 J** | **1400 J** | **785 J** | **13.2** | **1760 J** | **1810 J** |
| Magnesium | | 7439-95-4 | **11100 J** | **10500 J** | **6830 J** | **2520 J** | **8760** | **11700 J** | **7690 J** |
| Manganese | | 7439-96-5 | **320 J** | **332 J** | **263 J** | **210 J** | **173 J** | **299 J** | **250 J** |
| Mercury | | 7439-97-6 | **7.9 J** | **5.43 J** | **6.15 J** | **3.63 J** | **0.0085** | **3.05 J** | **8.05 J** |
| Nickel | | 7440-02-0 | **1090 J** | **1180 J** | **1360 J** | **1250 J** | **20.1** | **1300 J** | **2900 J** |
| Potassium | | 7440-09-7 | **3180 J** | **2610 J** | **1980 J** | **1080 J** | **1390** | **3970 J** | **2610 J** |
| Selenium | | 7782-49-2 | **10.3 J** | **11.5 J** | **11.5 J** | **17.4 J** | **0.45 J** | **12.3 J** | **15.6 J** |
| Silver | | 7440-22-4 | **29.3 J** | **32.8 J** | **33 J** | **10.7 J** | **0.16 J** | **37.1 J** | **46.9 J** |
| Sodium | | 7440-23-5 | **7410 J** | **2120 J** | **1320 J** | **632 J** | **255** | **23100 J** | **14500 J** |
| Thallium | | 7440-28-0 | **1 J** | **0.92 J** | **0.82 J** | **2.7 J** | **0.13** | **0.88 J** | **0.75 J** |
| Tin | | 7440-31-5 | **97 J** | **101 J** | **100 J** | **65.3 J** | **0.9** | **108 J** | **145 J** |
| Vanadium | | 7440-62-2 | **110 J** | **123 J** | **130 J** | **35.8 J** | **20.6** | **146 J** | **102 J** |
| Zinc | | 7440-66-6 | **6120 J** | **6290 J** | **6520 J** | **2740 J** | **62.7** | **7730 J** | **16700 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.6 J** | **2.3 J** | **4.5 J** | **2.2 J** | 0.64 UJ | **1.5 J** | **13.5 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **498 J** | **525 J** | **292 J** | 11.4 UJ | 31.8 U | 106 UJ | **840 J** |
| Black Carbon | | BC | **16600 J** | **16500 J** | **18300 J** | **108000 J** | **20600 J** | **8300 J** | **16500 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **2.0 J** | **2.2 J** | **2.8 J** | **2.8 J** | **0.43 J** | **1.8 J** | **2.1 J** |
| pH (s.u.) | | pH | **7.6 J** | **7.9 J** | **7.7 J** | **8.0 J** | **8.1 J** | **7.7 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **9440 J** | **10900 J** | **8200 J** | **4730 J** | **143 J** | **7900 J** | **15600 J** |
| Total Kjeldahl Nitrogen | | TKN | **8490 J** | **5290 J** | **5060 J** | **4350 J** | 191 U | **5940 J** | **8320 J** |
| Total Nitrogen | | 7727-37-9 | **8490 J** | **5290 J** | **5060 J** | **4350 J** | 50.0 U | **5940 J** | **8320 J** |
| Total Organic Carbon | | TOC | **111000 J** | **113000 J** | **129000 J** | **213000 J** | **81300 J** | **108000 J** | **169000 J** |
| Total Phosphorous | | 7723-14-0 | **409 J** | **313 J** | **282 J** | **111 J** | **83.4 J** | **672 J** | **9650 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED16(0.66-1.97) | GPECSED16(1.97-3.28) | GPECSED16(3.28-6.56) | GPECSED16(6.56-12.9NSU) | GPECSED17(0-0.33) | GPECSED17(0.33-0.66) | GPECSED17(0.66-1.97) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 0 | 0.33 | 0.66 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 12.9 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 0.63 UJ | **0.34 J** | **0.26 J** | NA | **4.2 J** | NA | NA |
| Toluene | | 108-88-3 | 0.63 UJ | **0.15 J** | **0.6 J** | NA | **8.1 J** | NA | NA |
| Ethylbenzene | | 100-41-4 | 0.63 UJ | **0.99 J** | **1.3 J** | NA | **9.7 J** | NA | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | 1.9 UJ | **2.2 J** | **2.7 J** | NA | **11 J** | NA | NA |
| Total BTEX | | TBTEX | ND | **3.68** | **4.86** | NA | **33** | NA | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 2.5 UJ | 2.8 UJ | 2.3 UJ | NA | 4.7 UJ | NA | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Bromodichloromethane | | 75-27-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Bromoform | | 75-25-2 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Bromomethane | | 74-83-9 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 2-Butanone | | 78-93-3 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Carbon disulfide | | 75-15-0 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Carbon tetrachloride | | 56-23-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Chlorobenzene | | 108-90-7 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Chloroethane | | 75-00-3 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Chloroform | | 67-66-3 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Chloromethane | | 74-87-3 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Cyclohexane | | 110-82-7 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2-Dibromoethane | | 106-93-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2-Dichloroethane | | 107-06-2 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1-Dichloroethene | | 75-35-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2-Dichloropropane | | 78-87-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Isopropyl benzene | | 98-82-8 | 0.63 UJ | **0.15 J** | **0.26 J** | NA | **0.82 J** | NA | NA |
| Methyl acetate | | 79-20-9 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Methylcyclohexane | | 108-87-2 | 0.63 UJ | **0.46 J** | **0.42 J** | NA | **0.2 J** | NA | NA |
| Methylene chloride | | 75-09-2 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Styrene | | 100-42-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Tetrachloroethene | | 127-18-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Trichloroethene | | 79-01-6 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Trichlorofluoromethane | | 75-69-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED16(0.66-1.97) | GPECSED16(1.97-3.28) | GPECSED16(3.28-6.56) | GPECSED16(6.56-12.9NSU) | GPECSED17(0-0.33) | GPECSED17(0.33-0.66) | GPECSED17(0.66-1.97) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 0 | 0.33 | 0.66 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 12.9 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.63 UJ | 0.69 UJ | 0.57 UJ | NA | 1.2 UJ | NA | NA |
| Total VOCs | | TVOC | ND | **4.29** | **5.54** | NA | **34.02** | NA | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **300 J** | **32 J** | **110 J** | **1.9** | **1.5 J** | **2.3 J** | **6.6 J** |
| Acenaphthylene | | 208-96-8 | **38 J** | **12 J** | **21 J** | **0.38 J** | **2.1 J** | **1.8 J** | **3.5 J** |
| Anthracene | | 120-12-7 | **180 J** | **32 J** | **100 J** | **1.5 J** | **2.8 J** | **3.1 J** | **7.5 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 U | 7.7 UJ | 6 UJ |
| Fluoranthene | | 206-44-0 | **180 J** | **60 J** | **130 J** | **2** | **11 J** | **11 J** | **18 J** |
| Fluorene | | 86-73-7 | **160 J** | **32 J** | **79 J** | **1.1 J** | 7.6 UJ | 7.7 UJ | 6 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **1000 J** | **91 J** | **330 J** | **4.4** | **1.6 J** | **1.5 J** | **2.7 J** |
| Naphthalene | | 91-20-3 | **1600 J** | **90 J** | **1300 J** | **15** | **4 J** | **3.6 J** | **6.7 J** |
| Phenanthrene | | 85-01-8 | **620 J** | **170 J** | **350 J** | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Pyrene | | 129-00-0 | **400 J** | **130 J** | **270 J** | **3.8** | **22 J** | **21 J** | **37 J** |
| Benz[a]anthracene | | 56-55-3 | **120 J** | 18 UJ | **99 J** | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Benzo[a]pyrene | | 50-32-8 | **93 J** | 18 UJ | **66 J** | 1.9 U | 7.6 U | 7.7 UJ | 6 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | **79 J** | 18 UJ | **61 J** | 1.9 U | 7.6 U | 7.7 UJ | 6 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Chrysene | | 218-01-9 | **110 J** | 18 UJ | **81 J** | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 19 UJ | 18 UJ | 14 UJ | 1.9 UJ | 7.6 UJ | 7.7 UJ | 6 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Total PAHs | | TPAH | **4880** | **649** | **2997** | **30.08** | **45** | **44.3** | **82** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **82 J** | **9.3 J** | **34 J** | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **31 J** | **76 J** | **16 J** | 19 U | **100 J** | **100 J** | **260 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Caprolactam | | 105-60-2 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| Carbazole | | 86-74-8 | **4.9 J** | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 94 U | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 4-Chloroaniline | | 106-47-8 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| 2-Chlorophenol | | 95-57-8 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Dibenzofuran | | 132-64-9 | **37 J** | 88 UJ | **22 J** | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Diethyl phthalate | | 84-66-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Dimethyl phthalate | | 131-11-3 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 1,4-Dioxane | | 123-91-1 | 190 UJ | 180 UJ | 140 UJ | 19 UJ | 75 UJ | 77 UJ | 60 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Hexachlorobutadiene | | 87-68-3 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED16(0.66-1.97) | GPECSED16(1.97-3.28) | GPECSED16(3.28-6.56) | GPECSED16(6.56-12.9NSU) | GPECSED17(0-0.33) | GPECSED17(0.33-0.66) | GPECSED17(0.66-1.97) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 0 | 0.33 | 0.66 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 12.9 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 94 UJ | 88 UJ | 70 UJ | 9.3 UJ | 37 UJ | 38 UJ | 30 UJ |
| Hexachloroethane | | 67-72-1 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Isophorone | | 78-59-1 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2-Methylphenol | | 95-48-7 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2-Nitroaniline | | 88-74-4 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| 3-Nitroaniline | | 99-09-2 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| 4-Nitroaniline | | 100-01-6 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| Nitrobenzene | | 98-95-3 | 190 UJ | 180 UJ | 140 UJ | 19 U | 75 UJ | 77 UJ | 60 UJ |
| 2-Nitrophenol | | 88-75-5 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 4-Nitrophenol | | 100-02-7 | 480 UJ | 450 UJ | 360 UJ | 48 U | 190 UJ | 200 UJ | 150 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Pentachlorophenol | | 87-86-5 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Phenol | | 108-95-2 | 19 UJ | 18 UJ | 14 UJ | 1.9 U | 7.6 UJ | 7.7 UJ | 6 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 94 UJ | 88 UJ | 70 UJ | 9.3 U | 37 UJ | 38 UJ | 30 UJ |
| Total SVOCs | | TSVOC | **5034.9** | **734.3** | **3069** | **30.08** | **145** | **144.3** | **342** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1248 | | 12672-29-6 | **2.9 J** | **2 J** | 0.46 UJ | 0.23 U | **2 J** | **2.3 J** | **3.8 J** |
| Aroclor 1254 | | 11097-69-1 | **6 J** | **4.1 J** | 0.46 UJ | 0.23 U | **3.3 J** | **3.3 J** | **5.3 J** |
| Aroclor 1260 | | 11096-82-5 | 0.49 UJ | 0.51 UJ | **1 J** | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.49 UJ | 0.51 UJ | 0.46 UJ | 0.23 U | 0.94 UJ | 0.98 UJ | 0.75 UJ |
| Total PCBs | | 1336-36-3 | **8.9** | **6.1** | **1** | ND | **5.3** | **5.6** | **9.1** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| alpha-bhc | | 319-84-6 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| beta-BHC | | 319-85-7 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED16(0.66-1.97) | GPECSED16(1.97-3.28) | GPECSED16(3.28-6.56) | GPECSED16(6.56-12.9NSU) | GPECSED17(0-0.33) | GPECSED17(0.33-0.66) | GPECSED17(0.66-1.97) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 0 | 0.33 | 0.66 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 12.9 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| delta-BHC | | 319-86-8 | **0.05 JN** | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| alpha-chlordane | | 5103-71-9 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.16 JN** | **0.15 JN** | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | **0.12 JN** |
| o,p'-DDE | | 3424-82-6 | 0.049 UJ | 0.051 UJ | **0.045 J** | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| 4,4'-DDE | | 72-55-9 | **0.29 JN** | **0.3 JN** | **0.11 JN** | 0.023 UJ | **0.092 J** | **0.1 J** | **0.13 JN** |
| o,p'-DDT | | 789-02-6 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| 4,4'-DDT | | 50-29-3 | **0.42 J** | **0.27 J** | 0.046 UJ | 0.023 UJ | **0.15 J** | **0.17 J** | **0.32 J** |
| Dieldrin | | 60-57-1 | **0.13 JN** | **0.11 JN** | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endosulfan I | | 959-98-8 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endosulfan II | | 33213-65-9 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endosulfan sulfate | | 1031-07-8 | **0.13 JN** | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endrin | | 72-20-8 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Endrin ketone | | 53494-70-5 | 0.049 UJ | 0.051 UJ | **0.049 J** | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Heptachlor | | 76-44-8 | 0.049 UJ | **0.082 J** | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | **0.041 J** | **0.049 J** | 0.075 UJ |
| Hexachlorobenzene | | 118-74-1 | **0.11 J** | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Methoxychlor | | 72-43-5 | 0.098 UJ | **0.37 J** | 0.091 UJ | 0.046 UJ | 0.19 UJ | 0.2 UJ | 0.15 UJ |
| Mirex | | 2385-85-5 | **0.12 J** | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| Mitotane | | 53-19-0 | 0.049 UJ | 0.051 UJ | **0.12 J** | 0.023 UJ | **0.17** | **0.15 J** | **0.35 J** |
| cis-Nonachlor | | 5103-73-1 | 0.049 UJ | 0.051 UJ | 0.046 UJ | 0.023 UJ | 0.094 UJ | 0.098 UJ | 0.075 UJ |
| trans-Nonachlor | | 39765-80-5 | 2 UJ | 2 UJ | 1.8 UJ | 0.93 UJ | 3.8 UJ | 3.9 UJ | 3 UJ |
| Toxaphene | | 8001-35-2 | 2 UJ | 2 UJ | 1.8 UJ | 0.93 UJ | 3.8 UJ | 3.9 UJ | 3 UJ |
| Total Pesticides | | TPEST | **1.41** | **1.282** | **0.324** | ND | **0.453** | **0.469** | **0.92** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | **0.000079 J** | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | **0.000041 J** | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | **0.0019** | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | **0.003** | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | **0.004** | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | **0.0008** | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | **0.008** | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | **0.00009 J** | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | **0.00046** | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | **0.000076 J** | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | **0.00084** | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | **0.00095** | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | **0.00048** | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | **0.000029 J** | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | **0.00014 J** | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | **0.000032 J** | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | **0.0016** | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | 0.00026 U | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | **0.000025 J** | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | **0.0026** | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | **0.00038** | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | **0.00054** | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | 0.064 U | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | **0.026062** | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 20 UJ | 22 UJ | 18 UJ | 9.6 U | 38 UJ | 41 UJ | 31 UJ |
| 2,4-D | | 94-75-7 | 0.2 UJ | 0.22 UJ | 0.18 UJ | 0.096 U | 0.38 UJ | 0.41 UJ | 0.31 UJ |
| 2,4-DB | | 94-82-6 | 0.2 UJ | 0.22 UJ | 0.18 UJ | 0.096 U | 0.38 UJ | 0.41 UJ | 0.31 UJ |
| Dicamba | | 1918-00-9 | 0.1 UJ | 0.11 UJ | 0.09 UJ | 0.048 U | 0.19 UJ | 0.2 UJ | 0.15 UJ |
| Dichloroprop | | 120-36-5 | 0.2 UJ | 0.22 UJ | 0.18 UJ | 0.096 U | 0.38 UJ | 0.41 UJ | 0.31 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.23 UJ | 0.25 UJ | 0.2 UJ | 0.11 U | 0.42 UJ | 0.46 UJ | 0.34 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED16 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED16(0.66-1.97) | GPECSED16(1.97-3.28) | GPECSED16(3.28-6.56) | GPECSED16(6.56-12.9NSU) | GPECSED17(0-0.33) | GPECSED17(0.33-0.66) | GPECSED17(0.66-1.97) |
| | | Start Depth | 0.66 | 1.97 | 3.28 | 6.56 | 0 | 0.33 | 0.66 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 12.9 | 0.33 | 0.66 | 1.97 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.03 UJ | 0.033 UJ | 0.027 UJ | 0.014 U | 0.057 UJ | 0.061 UJ | 0.046 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 20 UJ | **12 J** | 18 UJ | 9.6 U | 38 UJ | 41 UJ | 31 UJ |
| Silvex | | 93-72-1 | 0.05 UJ | 0.055 UJ | 0.045 UJ | 0.024 U | 0.094 UJ | 0.1 UJ | 0.076 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.05 UJ | 0.055 UJ | 0.045 UJ | 0.024 U | 0.094 UJ | 0.1 UJ | 0.076 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | R | R | 0.00012 UJ | 0.00047 UJ | 0.0048 UJ | 0.0038 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **13100 J** | **13700 J** | **10700 J** | **5260** | **18400 J** | **17600 J** | **17400 J** |
| Antimony | | 7440-36-0 | **24.8 J** | **25.2 J** | **26.0 J** | **0.36 J** | **5.0 J** | **5.2 J** | **7.7 J** |
| Arsenic | | 7440-38-2 | **315 J** | **296 J** | **345 J** | **7.7 J** | **64.7 J** | **75.5 J** | **119 J** |
| Barium | | 7440-39-3 | **341 J** | **305 J** | **315 J** | **36.8 J** | **232 J** | **242 J** | **253 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1 J** | **0.86 J** | **0.27** | **1.1 J** | **1 J** | **1.1 J** |
| Cadmium | | 7440-43-9 | **140 J** | **60.3 J** | **32.2 J** | **0.44 J** | **50.2 J** | **59.6 J** | **95.3 J** |
| Calcium | | 7440-70-2 | **16300 J** | **23000 J** | **12500 J** | **8420** | **16000 J** | **16700 J** | **17100 J** |
| Chromium | | 7440-47-3 | **937 J** | **1330 J** | **477 J** | **17.9 J** | **436 J** | **502 J** | **781 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **37.5 J** | **39.6 J** | **31.6 J** | **5.3 J** | **22.7 J** | **23.5 J** | **31.3 J** |
| Copper | | 7440-50-8 | **9650 J** | **11500 J** | **13100 J** | **107 J** | **3620 J** | **4110 J** | **5750 J** |
| Iron | | 7439-89-6 | **43100 J** | **41700 J** | **36000 J** | **12200 J** | **39500 J** | **40200 J** | **39800 J** |
| Lead | | 7439-92-1 | **1590 J** | **1970 J** | **1350 J** | **31.1 J** | **930 J** | **1010 J** | **1340 J** |
| Magnesium | | 7439-95-4 | **7050 J** | **7320 J** | **5410 J** | **6390** | **14300 J** | **14000 J** | **12900 J** |
| Manganese | | 7439-96-5 | **274 J** | **265 J** | **212 J** | **129 J** | **334 J** | **318 J** | **325 J** |
| Mercury | | 7439-97-6 | **7.5 J** | **6.81 J** | **5.95 J** | **0.955** | **3.09 J** | **5.72 J** | **4.8 J** |
| Nickel | | 7440-02-0 | **2960 J** | **2820 J** | **3340 J** | **27.3 J** | **531 J** | **621 J** | **1030 J** |
| Potassium | | 7440-09-7 | **2580 J** | **2780 J** | **2120 J** | **1540** | **4640 J** | **4600 J** | **3590 J** |
| Selenium | | 7782-49-2 | **17.3 J** | **13.9 J** | **24.4 J** | **1 J** | **8.0 J** | **8.7 J** | **11.3 J** |
| Silver | | 7440-22-4 | **33.5 J** | **37 J** | **18.7 J** | **0.23 J** | **20.7 J** | **23.3 J** | **30.5 J** |
| Sodium | | 7440-23-5 | **12000 J** | **12900 J** | **9320 J** | **557** | **27600 J** | **29400 J** | **21500 J** |
| Thallium | | 7440-28-0 | **1.2 J** | **0.96 J** | **1.7 J** | **0.18 J** | **0.85 J** | **0.87 J** | **0.81 J** |
| Tin | | 7440-31-5 | **155 J** | **164 J** | **132 J** | **2.1 J** | **71.9 J** | **79 J** | **96.6 J** |
| Vanadium | | 7440-62-2 | **101 J** | **90.4 J** | **62.9 J** | **20.3 J** | **90.5 J** | **92.1 J** | **107 J** |
| Zinc | | 7440-66-6 | **9020 J** | **8780 J** | **5990 J** | **81 J** | **3260 J** | **3860 J** | **5600 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **6.2 J** | **8.4 J** | **7.9 J** | 0.60 UJ | 2.4 UJ | **1.3 J** | **2.4 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1610 J** | **2190 J** | **2210 J** | **70.8** | 118 UJ | **625 J** | **615 J** |
| Black Carbon | | BC | **30000 J** | **11800 J** | **44300 J** | **7320 J** | **16800 J** | **7890 J** | **6470 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **2.4 J** | **1.9 J** | **1.6 J** | 1.2 UJ | **2.5 J** | **2.5 J** | **2.2 J** |
| pH (s.u.) | | pH | **7.9 J** | **7.8 J** | **8.0 J** | **7.8 J** | **7.7 J** | **7.8 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **5280 J** | **11000 J** | **3860 J** | **135 J** | **6660 J** | **10200 J** | **9660 J** |
| Total Kjeldahl Nitrogen | | TKN | **9450 J** | **9860 J** | **8290 J** | **10300** | **5960 J** | **6430 J** | **7200 J** |
| Total Nitrogen | | 7727-37-9 | **9450 J** | **9860 J** | **8290 J** | **10300** | **5960 J** | **6430 J** | **7200 J** |
| Total Organic Carbon | | TOC | **171000 J** | **158000 J** | **169000 J** | **11200 J** | **91300 J** | **91700 J** | **102000 J** |
| Total Phosphorous | | 7723-14-0 | **106 J** | **380 J** | **2400 J** | **143 J** | **1370 J** | 50.8 UJ | **240 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED18 | GPEC-SED18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED17(1.97-3.28) | GPECSED17(3.28-6.56) | GPECSED17(6.56-9.48) | GPECSED17(9.48-10.8) | GPECSED17(10.8-13.9NSU) | GPECSED18(0-0.33) | GPECSED18(0.33-0.67) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.8 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 9.48 | 10.8 | 13.9 | 0.33 | 0.67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | **10 J** | **15 J** | 0.33 UJ | 1.4 UJ | NA |
| Toluene | | 108-88-3 | NA | NA | **20 J** | **33 J** | **0.17 J** | 1.4 UJ | NA |
| Ethylbenzene | | 100-41-4 | NA | NA | **22 J** | **34 J** | **0.63 J** | **0.49 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | **25 J** | **38 J** | **0.88 J** | 4.1 UJ | NA |
| Total BTEX | | TBTEX | NA | NA | **77** | **120** | **1.68** | **0.49** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | 2.5 UJ | 11 UJ | 1.3 UJ | 5.4 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Bromodichloromethane | | 75-27-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Bromoform | | 75-25-2 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Bromomethane | | 74-83-9 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 2-Butanone | | 78-93-3 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Carbon disulfide | | 75-15-0 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Chlorobenzene | | 108-90-7 | NA | NA | **0.12 J** | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Chloroethane | | 75-00-3 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Chloroform | | 67-66-3 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Chloromethane | | 74-87-3 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Cyclohexane | | 110-82-7 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Dibromochloromethane | | 124-48-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Isopropyl benzene | | 98-82-8 | NA | NA | **1.8 J** | **2.7 J** | **0.11 J** | 1.4 UJ | NA |
| Methyl acetate | | 79-20-9 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Methylcyclohexane | | 108-87-2 | NA | NA | **0.45 J** | **0.31 J** | 0.33 UJ | 1.4 UJ | NA |
| Methylene chloride | | 75-09-2 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Styrene | | 100-42-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Tetrachloroethene | | 127-18-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Trichloroethene | | 79-01-6 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED18 | GPEC-SED18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED17(1.97-3.28) | GPECSED17(3.28-6.56) | GPECSED17(6.56-9.48) | GPECSED17(9.48-10.8) | GPECSED17(10.8-13.9NSU) | GPECSED18(0-0.33) | GPECSED18(0.33-0.67) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.8 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 9.48 | 10.8 | 13.9 | 0.33 | 0.67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Vinyl chloride | | 75-01-4 | NA | NA | 0.61 UJ | 2.8 UJ | 0.33 UJ | 1.4 UJ | NA |
| Total VOCs | | TVOC | NA | NA | **79.37** | **123.01** | **1.79** | **0.49** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **8 J** | **18 J** | **1100 J** | **1500 J** | **23** | **3.5 J** | **3.8 J** |
| Acenaphthylene | | 208-96-8 | **3.2 J** | **5.5 J** | **150 J** | **170 J** | **6.5** | **3.1 J** | **2.8 J** |
| Anthracene | | 120-12-7 | **7.8 J** | **13 J** | **470 J** | **670 J** | **15** | **3.9 J** | **4.1 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Fluoranthene | | 206-44-0 | **22 J** | **30 J** | **430 J** | **600 J** | **13** | **14 J** | **14 J** |
| Fluorene | | 86-73-7 | **4.3 J** | **14 J** | **570 J** | **740 J** | **15** | 8.2 UJ | **1.3 J** |
| 2-Methylnaphthalene | | 91-57-6 | **4.2 J** | **20 J** | **3100 J** | **3900 J** | **68** | **1.5 J** | **2 J** |
| Naphthalene | | 91-20-3 | **9.1 J** | **33 J** | **6500 J** | **7400 J** | **86** | **5 J** | **5.3 J** |
| Phenanthrene | | 85-01-8 | **17 J** | **60 J** | **1700 J** | **2300 J** | **53** | 8.2 UJ | 7.7 UJ |
| Pyrene | | 129-00-0 | **44 J** | **61 J** | **1000 J** | **1400 J** | **32** | **22 J** | **27 J** |
| Benz[a]anthracene | | 56-55-3 | 6 UJ | 9.5 UJ | **290 J** | 130 UJ | **8.7** | 8.2 UJ | 7.7 UJ |
| Benzo[a]pyrene | | 50-32-8 | 6 UJ | 9.5 UJ | **180 J** | 130 UJ | **6.9** | 8.2 UJ | 7.7 UJ |
| Benzo[b]fluoranthene | | 205-99-2 | 6 UJ | 9.5 UJ | **170 J** | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Benzo[k]fluoranthene | | 207-08-9 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Chrysene | | 218-01-9 | 6 UJ | 9.5 UJ | **270 J** | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Dibenz[a,h]anthracene | | 53-70-3 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Total PAHs | | TPAH | **119.6** | **254.5** | **15930** | **18680** | **327.1** | **53** | **60.3** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **4.4 J** | **250 J** | **320 J** | **6.6 J** | 40 UJ | 38 UJ | |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **420 J** | **230 J** | 390 UJ | 1300 UJ | 21 U | **87 J** | **140 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Caprolactam | | 105-60-2 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| Carbazole | | 86-74-8 | 6 UJ | 9.5 UJ | **16 J** | **21 J** | **0.34 J** | 8.2 UJ | 7.7 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 4-Chloroaniline | | 106-47-8 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| 2-Chlorophenol | | 95-57-8 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Dibenzofuran | | 132-64-9 | 30 UJ | 47 UJ | **99 J** | **130 J** | **2.6 J** | 40 UJ | 38 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Diethyl phthalate | | 84-66-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Dimethyl phthalate | | 131-11-3 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 1,4-Dioxane | | 123-91-1 | 60 UJ | 94 UJ | 390 UJ | 1300 UJ | 21 UJ | 82 UJ | 77 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Hexachlorobutadiene | | 87-68-3 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED18 | GPEC-SED18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED17(1.97-3.28) | GPECSED17(3.28-6.56) | GPECSED17(6.56-9.48) | GPECSED17(9.48-10.8) | GPECSED17(10.8-13.9NSU) | GPECSED18(0-0.33) | GPECSED18(0.33-0.67) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.8 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 9.48 | 10.8 | 13.9 | 0.33 | 0.67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 UJ | 40 UJ | 38 UJ |
| Hexachloroethane | | 67-72-1 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Isophorone | | 78-59-1 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2-Methylphenol | | 95-48-7 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2-Nitroaniline | | 88-74-4 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| 3-Nitroaniline | | 99-09-2 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| 4-Nitroaniline | | 100-01-6 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| Nitrobenzene | | 98-95-3 | 60 UJ | 94 UJ | 390 UJ | 1300 UJ | 21 U | 82 UJ | 77 UJ |
| 2-Nitrophenol | | 88-75-5 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 4-Nitrophenol | | 100-02-7 | 150 UJ | 240 UJ | 1000 UJ | 3300 UJ | 54 U | 210 UJ | 200 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Pentachlorophenol | | 87-86-5 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Phenol | | 108-95-2 | 6 UJ | 9.5 UJ | 39 UJ | 130 UJ | 2.1 U | 8.2 UJ | 7.7 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 30 UJ | 47 UJ | 190 UJ | 650 UJ | 10 U | 40 UJ | 38 UJ |
| Total SVOCs | | TSVOC | **539.6** | **488.9** | **16295** | **19151** | **336.64** | **140** | **200.3** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1248 | | 12672-29-6 | **4.3 J** | **5.4 J** | **2.3 J** | **2.4 J** | 0.25 UJ | **7.7 J** | **13 J** |
| Aroclor 1254 | | 11097-69-1 | **6.2 J** | **6.5 J** | **3.3 J** | **3.4 J** | 0.25 UJ | **7.4 J** | **10 J** |
| Aroclor 1260 | | 11096-82-5 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.72 UJ | 0.54 UJ | 0.49 UJ | 0.44 UJ | 0.25 UJ | 1 UJ | 0.96 UJ |
| Total PCBs | | 1336-36-3 | **10.5** | **11.9** | **5.6** | **5.8** | ND | **15.1** | **23** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | **14000 J** | NA | NA | NA | NA | **13000 J** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | **3800 J** | NA | NA | NA | NA | **5000 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | **11000 J** | NA | NA | NA | NA | **9900 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | **230 J** | NA | NA | NA | NA | **290 J** |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | **7500 J** | NA | NA | NA | NA | **12000 J** |
| Total HxCDF | | 55684-94-1 | NA | **9000 J** | NA | NA | NA | NA | **6900 J** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | **900 J** | NA | NA | NA | NA | **800 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | **7.3 J** | NA | NA | NA | NA | 200 UJ |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | **1600 J** | NA | NA | NA | NA | **2100 J** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | **2100 J** | NA | NA | NA | NA | **1400 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | **57 J** | NA | NA | NA | NA | **130 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | **180 J** | NA | NA | NA | NA | **210 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | **110 J** | NA | NA | NA | NA | **180 J** |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | **270 J** | NA | NA | NA | NA | **330 J** |
| Octachlorodibenzofuran | | 39001-02-0 | NA | **7600 J** | NA | NA | NA | NA | **5700 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | **33000 J** | NA | NA | NA | NA | **50000 J** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | **5800 J** | NA | NA | NA | NA | **3600 J** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | **330 J** | NA | NA | NA | NA | **230 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | **520 J** | NA | NA | NA | NA | **800 J** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | **49 J** | NA | NA | NA | NA | **90 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | **590 J** | NA | NA | NA | NA | **320 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | **4100 J** | NA | NA | NA | NA | **3000 J** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | **380 J** | NA | NA | NA | NA | **360 J** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | **200 J** | NA | NA | NA | NA | **160 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | **43 J** | NA | NA | NA | NA | 39 UJ |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.072 UJ | **0.13 J** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| alpha-bhc | | 319-84-6 | 0.072 UJ | 0.054 UJ | 0.25 UJ | **0.25 J** | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| beta-BHC | | 319-85-7 | 0.072 UJ | **0.095 JN** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED18 | GPEC-SED18 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED17(1.97-3.28) | GPECSED17(3.28-6.56) | GPECSED17(6.56-9.48) | GPECSED17(9.48-10.8) | GPECSED17(10.8-13.9NSU) | GPECSED18(0-0.33) | GPECSED18(0.33-0.67) |
| | | Start Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.8 | 0 | 0.33 |
| | | End Depth | 3.28 | 6.56 | 9.48 | 10.8 | 13.9 | 0.33 | 0.67 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | **0.035 J** |
| delta-BHC | | 319-86-8 | **0.075 JN** | **0.11 J** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| alpha-chlordane | | 5103-71-9 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.072 UJ | 0.054 UJ | 0.25 UJ | **0.41 J** | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.12 JN** | **0.18 JN** | 0.25 UJ | **0.31 J** | 0.025 UJ | **0.11 JN** | **0.15 JN** |
| o,p'-DDE | | 3424-82-6 | 0.072 UJ | 0.054 UJ | **0.09 J** | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| 4,4'-DDE | | 72-55-9 | **0.15 JN** | **0.16 JN** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| o,p'-DDT | | 789-02-6 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| 4,4'-DDT | | 50-29-3 | **0.38 J** | **0.41 J** | 0.25 UJ | 0.44 UJ | 0.025 UJ | **0.19 J** | **0.25 J** |
| Dieldrin | | 60-57-1 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endosulfan I | | 959-98-8 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endosulfan II | | 33213-65-9 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.072 UJ | 0.054 UJ | 0.25 UJ | **0.29 J** | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endrin | | 72-20-8 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Endrin ketone | | 53494-70-5 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | **0.13 JN** |
| Heptachlor | | 76-44-8 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.072 UJ | **0.082 JN** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.072 UJ | 0.054 UJ | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Methoxychlor | | 72-43-5 | 0.14 UJ | 0.11 UJ | 0.49 UJ | 0.88 UJ | 0.05 UJ | 0.21 UJ | 0.19 UJ |
| Mirex | | 2385-85-5 | 0.072 UJ | 0.054 UJ | **0.57 J** | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| Mitotane | | 53-19-0 | **0.39 J** | **0.49 J** | **0.2 J** | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.072 UJ | **0.055 JN** | 0.25 UJ | 0.44 UJ | 0.025 UJ | 0.1 UJ | 0.096 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.9 UJ | 2.2 UJ | 9.8 UJ | 18 UJ | 1 UJ | 4.2 UJ | 3.9 UJ |
| Toxaphene | | 8001-35-2 | 2.9 UJ | 2.2 UJ | 9.8 UJ | 18 UJ | 1 UJ | 4.2 UJ | 3.9 UJ |
| Total Pesticides | | TPEST | **1.115** | **1.712** | **0.86** | **1.26** | ND | **0.3** | **0.565** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | **0.000043 J** | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | **0.00039 J** | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | **0.00054** | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | **0.0017** | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | **0.000092 J** | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | **0.00088** | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | **0.00027 J** | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | **0.00035 J** | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | **0.00026 J** | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | **0.0003 J** | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | **0.000025 J** | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | **0.000034 J** | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | 0.00051 U | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | **0.00035 J** | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | **0.0027 J** | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | **0.000021 J** | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | **0.0007** | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | **0.000089 J** | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | **0.00021 J** | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | 0.13 U | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | **0.008954** | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 31 UJ | 24 UJ | 20 UJ | 18 UJ | 11 U | 43 UJ | 39 UJ |
| 2,4-D | | 94-75-7 | 0.31 UJ | 0.24 UJ | 0.2 UJ | 0.18 UJ | 0.11 U | 0.43 UJ | 0.39 UJ |
| 2,4-DB | | 94-82-6 | 0.31 UJ | 0.24 UJ | **0.057 J** | **0.07 J** | 0.11 U | 0.43 UJ | 0.39 UJ |
| Dicamba | | 1918-00-9 | 0.16 UJ | 0.12 UJ | 0.098 UJ | 0.088 UJ | 0.054 U | 0.22 UJ | 0.19 UJ |
| Dichloroprop | | 120-36-5 | 0.31 UJ | 0.24 UJ | 0.2 UJ | 0.18 UJ | 0.11 U | 0.43 UJ | 0.39 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.35 UJ | 0.26 UJ | 0.22 UJ | 0.2 UJ | 0.12 U | 0.49 UJ | 0.43 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED17 | GPEC-SED18 | GPEC-SED18 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED17(1.97-3.28) | GPECSED17(3.28-6.56) | GPECSED17(6.56-9.48) | GPECSED17(9.48-10.8) | GPECSED17(10.8-13.9NSU) | GPECSED18(0-0.33) | GPECSED18(0.33-0.67) |
| | | | Start Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.8 | 0 | 0.33 |
| | | | End Depth | 3.28 | 6.56 | 9.48 | 10.8 | 13.9 | 0.33 | 0.67 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Dinoseb | | 88-85-7 | 0.047 UJ | 0.035 UJ | 0.029 U | 0.026 UJ | 0.016 U | 0.065 UJ | 0.058 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 31 UJ | 24 UJ | 20 UJ | 18 UJ | 11 U | 43 UJ | 39 UJ |
| Silvex | | 93-72-1 | 0.078 UJ | 0.059 UJ | **0.0056 J** | 0.044 UJ | 0.027 U | 0.11 UJ | 0.096 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.078 UJ | 0.059 UJ | 0.049 UJ | 0.044 UJ | 0.027 U | 0.11 UJ | 0.096 UJ |
| **Metals** | mg/kg | | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.0037 UJ | 0.0028 UJ | R | 0.00022 UJ | 0.00013 UJ | 0.00054 UJ | R |
| **Total Metals** | mg/kg | | | | | | | | | |
| Aluminum | | 7429-90-5 | **17700 J** | **16700 J** | **12900 J** | **10100 J** | **17900** | **17300 J** | **16000 J** |
| Antimony | | 7440-36-0 | **7.9 J** | **11.4 J** | **26.3 J** | **20.7 J** | 0.13 UJ | **4.8 J** | **5.6 J** |
| Arsenic | | 7440-38-2 | **127 J** | **152 J** | **380 J** | **303 J** | **3 J** | **67.1 J** | **85.5 J** |
| Barium | | 7440-39-3 | **256 J** | **269 J** | **350 J** | **327 J** | **205 J** | **228 J** | **234 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1.3 J** | **1.0 J** | **0.87 J** | **0.91** | **1 J** | **1 J** |
| Cadmium | | 7440-43-9 | **110 J** | **145 J** | **85.7 J** | **18.9 J** | **0.47 J** | **56.3 J** | **74.7 J** |
| Calcium | | 7440-70-2 | **17300 J** | **16800 J** | **14200 J** | **9220 J** | **10800** | **15600 J** | **18400 J** |
| Chromium | | 7440-47-3 | **881 J** | **1150 J** | **678 J** | **211 J** | **44.9 J** | **469 J** | **610 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **33.6 J** | **42.9 J** | **40.5 J** | **23.9 J** | **14.2 J** | **22.3 J** | **24.8 J** |
| Copper | | 7440-50-8 | **6400 J** | **8780 J** | **15600 J** | **6400 J** | **50.6 J** | **3650 J** | **4580 J** |
| Iron | | 7439-89-6 | **42900 J** | **38000 J** | **40400 J** | **30500 J** | **30400 J** | **39300 J** | **38200 J** |
| Lead | | 7439-92-1 | **1460 J** | **1670 J** | **1480 J** | **1040 J** | **18.3 J** | **942 J** | **1100 J** |
| Magnesium | | 7439-95-4 | **12500 J** | **9490 J** | **6620 J** | **5200 J** | **13600** | **13800 J** | **12600 J** |
| Manganese | | 7439-96-5 | **324 J** | **276 J** | **263 J** | **235 J** | **495 J** | **309 J** | **289 J** |
| Mercury | | 7439-97-6 | **6.9 J** | **8.91 J** | **6.79 J** | **5.71 J** | **0.0407** | **3.47 J** | **3.81 J** |
| Nickel | | 7440-02-0 | **1160 J** | **1570 J** | **3720 J** | **1490 J** | **45.4 J** | **588 J** | **752 J** |
| Potassium | | 7440-09-7 | **3690 J** | **3080 J** | **2600 J** | **2090 J** | **6120** | **4540 J** | **3970 J** |
| Selenium | | 7782-49-2 | **12.9 J** | **14.1 J** | **30.9 J** | **27.7 J** | **0.64 J** | **7.8 J** | **9.3 J** |
| Silver | | 7440-22-4 | **35.6 J** | **43.0 J** | **26.4 J** | **13.7 J** | **0.12 J** | **21.2 J** | **25.3 J** |
| Sodium | | 7440-23-5 | **21300 J** | **15100 J** | **10800 J** | **7300 J** | **1700** | **30500 J** | **27300 J** |
| Thallium | | 7440-28-0 | **0.82 J** | **0.78 J** | **1.8 J** | **2.0 J** | **0.47 J** | **0.85 J** | **0.82 J** |
| Tin | | 7440-31-5 | **109 J** | **115 J** | **133 J** | **95.9 J** | **1.4 J** | **73.2 J** | **80.3 J** |
| Vanadium | | 7440-62-2 | **140 J** | **151 J** | **84.8 J** | **41.5 J** | **47 J** | **85.6 J** | **95.9 J** |
| Zinc | | 7440-66-6 | **6330 J** | **8390 J** | **7350 J** | **3520 J** | **90.7 J** | **3660 J** | **4690 J** |
| **Cyanides** | mg/kg | | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **5.0 J** | **4.8 J** | **3.4 J** | **9.8 J** | 0.67 UJ | 2.7 UJ | 2.4 UJ |
| **Other** | mg/kg | | | | | | | | | |
| Ammonia | | 7664-41-7 | **555 J** | **799 J** | **846 J** | **754 J** | **99.7** | **1280 J** | **1480 J** |
| Black Carbon | | BC | **11700 J** | **8830 J** | **57600 J** | **78900 J** | **12700 J** | **10000 J** | **14800 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **2.5 J** | **2.5 J** | **2.4 J** | **1.6 J** | **0.62 J** | **1.2 J** | **0.89 J** |
| pH (s.u.) | | pH | **7.8 J** | **7.6 J** | **7.9 J** | **7.9 J** | **8.1 J** | **7.8 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **8060 J** | **9920 J** | **4130 J** | **1670 J** | **203 J** | **7200 J** | **9710 J** |
| Total Kjeldahl Nitrogen | | TKN | **7450 J** | **7690 J** | **9460 J** | **5760 J** | **414** | **6990 J** | **9070 J** |
| Total Nitrogen | | 7727-37-9 | **7450 J** | **7690 J** | **9460 J** | **5760 J** | **415** | **6990 J** | **9070 J** |
| Total Organic Carbon | | TOC | **110000 J** | **121000 J** | **231000 J** | **263000 J** | **21300 J** | **89700 J** | **96500 J** |
| Total Phosphorous | | 7723-14-0 | **75.5 J** | **1450 J** | **48.2 J** | 22.0 UJ | **119 J** | **465 J** | **92.3 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED19 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED18(0.67-1.97) | GPECSED18(1.97-3.28) | GPECSED18(3.28-6.56) | GPECSED18(6.56-9.48) | GPECSED18(9.48-10.75) | GPECSED18(10.75-15.5NSU) | GPECSED19(0-0.33) |
| | | Start Depth | 0.67 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 15.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.013 J** | NA | **0.36 J** | **1.6 J** | **13** | **0.21 J** | 0.98 UJ |
| Toluene | | 108-88-3 | 0.022 U | NA | 0.71 UJ | **2 J** | **37** | **0.17 J** | 0.98 UJ |
| Ethylbenzene | | 100-41-4 | **0.01 J** | NA | **0.85 J** | **9.7 J** | **49** | **1.3 J** | **0.32 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.016 J** | NA | **1.1 J** | **12 J** | **58** | **1.2 J** | **1.8 J** |
| Total BTEX | | TBTEX | **0.039** | NA | **2.31** | **25.3** | **157** | **2.88** | **2.12** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.088 UJ | NA | 2.9 UJ | 2.8 UJ | 18 U | 1.3 UJ | 3.9 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Bromodichloromethane | | 75-27-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Bromoform | | 75-25-2 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Bromomethane | | 74-83-9 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 2-Butanone | | 78-93-3 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Carbon disulfide | | 75-15-0 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Carbon tetrachloride | | 56-23-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Chlorobenzene | | 108-90-7 | 0.022 UJ | NA | 0.71 UJ | **0.13 J** | 4.5 U | 0.33 UJ | 0.98 UJ |
| Chloroethane | | 75-00-3 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Chloroform | | 67-66-3 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Chloromethane | | 74-87-3 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Cyclohexane | | 110-82-7 | 0.022 UJ | NA | 0.71 UJ | **0.11 J** | 4.5 U | 0.33 UJ | **0.8 J** |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Dibromochloromethane | | 124-48-1 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,2-Dibromoethane | | 106-93-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.022 UJ | NA | 0.71 UJ | **0.18 J** | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.022 UJ | NA | **0.12 J** | **0.14 J** | 4.5 U | 0.33 UJ | 0.98 UJ |
| Dichlorodifluoromethane | | 75-71-8 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1-Dichloroethane | | 75-34-3 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,2-Dichloroethane | | 107-06-2 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1-Dichloroethene | | 75-35-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,2-Dichloropropane | | 78-87-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Isopropyl benzene | | 98-82-8 | 0.022 UJ | NA | **0.084 J** | **1 J** | **3.8 J** | **0.16 J** | **0.13 J** |
| Methyl acetate | | 79-20-9 | 0.022 UJ | NA | 0.71 UJ | **0.7 J** | 4.5 UJ | 0.33 UJ | 0.98 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Methylcyclohexane | | 108-87-2 | 0.022 UJ | NA | **0.083 J** | **0.42 J** | **0.72 J** | 0.33 UJ | **3.5 J** |
| Methylene chloride | | 75-09-2 | 0.022 UJ | NA | **0.33 J** | **0.33 J** | 4.5 U | 0.33 UJ | 0.98 UJ |
| Styrene | | 100-42-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Tetrachloroethene | | 127-18-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.022 U | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 UJ | 0.33 UJ | 0.98 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Trichloroethene | | 79-01-6 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Trichlorofluoromethane | | 75-69-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED19 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED18(0.67-1.97) | GPECSED18(1.97-3.28) | GPECSED18(3.28-6.56) | GPECSED18(6.56-9.48) | GPECSED18(9.48-10.75) | GPECSED18(10.75-15.5NSU) | GPECSED19(0-0.33) |
| | | Start Depth | 0.67 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 15.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Vinyl chloride | | 75-01-4 | 0.022 UJ | NA | 0.71 UJ | 0.69 UJ | 4.5 U | 0.33 UJ | 0.98 UJ |
| Total VOCs | | TVOC | **0.039** | NA | **2.927** | **28.31** | **161.52** | **3.04** | **6.55** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **6.5 J** | **11 J** | **27 J** | **160 J** | **930** | **17** | **3.2 J** |
| Acenaphthylene | | 208-96-8 | **3.6 J** | **3.6 J** | **7.5 J** | **24 J** | **150** | **2.5** | **2.5 J** |
| Anthracene | | 120-12-7 | **9.2 J** | **11 J** | **28 J** | **84 J** | **490** | **8.9** | **4.6 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | **5.9 J** |
| Fluoranthene | | 206-44-0 | **24 J** | **28 J** | **44 J** | **97 J** | **460** | **9.9** | **13 J** |
| Fluorene | | 86-73-7 | 7.1 UJ | **6.3 J** | **19 J** | **99 J** | **510** | **9.6** | 5.8 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **2.4 J** | **4.8 J** | **39 J** | **400 J** | **2500** | **44** | **1.4 J** |
| Naphthalene | | 91-20-3 | **5.7 J** | **13 J** | **92 J** | **910 J** | **7000** | **110** | **2.5 J** |
| Phenanthrene | | 85-01-8 | 7.1 UJ | 12 UJ | **94 J** | **350 J** | **1600** | **32** | **3.1 J** |
| Pyrene | | 129-00-0 | **46 J** | **54 J** | **91 J** | **220 J** | **1100** | **21** | **26 J** |
| Benz[a]anthracene | | 56-55-3 | 7.1 UJ | 12 UJ | **36 J** | **70 J** | **350** | **7.2** | **11 J** |
| Benzo[a]pyrene | | 50-32-8 | 7.1 UJ | 12 UJ | **26 J** | **51 J** | **250** | 2.1 U | **8.6 J** |
| Benzo[b]fluoranthene | | 205-99-2 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | **230** | 2.1 U | **11 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Chrysene | | 218-01-9 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | **360** | 2.1 U | **12 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | **4 J** |
| Total PAHs | | TPAH | **97.4** | **131.7** | **503.5** | **2465** | **15930** | **262.1** | **108.8** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 35 UJ | 61 UJ | **7.3 J** | **41 J** | **220 J** | **3.8 J** | 29 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **610 J** | **470 J** | **270 J** | **130 J** | 710 U | 21 U | **250 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Caprolactam | | 105-60-2 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| Carbazole | | 86-74-8 | 7.1 UJ | 12 UJ | 9.2 UJ | **6.3 J** | **18 J** | **0.36 J** | 5.8 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 4-Chloroaniline | | 106-47-8 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| 2-Chlorophenol | | 95-57-8 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Dibenzofuran | | 132-64-9 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | **98 J** | **1.5 J** | 29 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Diethyl phthalate | | 84-66-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Dimethyl phthalate | | 131-11-3 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 1,4-Dioxane | | 123-91-1 | 71 UJ | 120 UJ | 91 UJ | 170 UJ | 710 UJ | 21 UJ | 58 UJ |
| Di-n-octyl phthalate | | 117-84-0 | **6.3 J** | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Hexachlorobutadiene | | 87-68-3 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED19 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED18(0.67-1.97) | GPECSED18(1.97-3.28) | GPECSED18(3.28-6.56) | GPECSED18(6.56-9.48) | GPECSED18(9.48-10.75) | GPECSED18(10.75-15.5NSU) | GPECSED19(0-0.33) |
| | | Start Depth | 0.67 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 15.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 UJ | 10 UJ | 29 UJ |
| Hexachloroethane | | 67-72-1 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Isophorone | | 78-59-1 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2-Methylphenol | | 95-48-7 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2-Nitroaniline | | 88-74-4 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| 3-Nitroaniline | | 99-09-2 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| 4-Nitroaniline | | 100-01-6 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| Nitrobenzene | | 98-95-3 | 71 UJ | 120 UJ | 91 UJ | 170 UJ | 710 U | 21 U | 58 UJ |
| 2-Nitrophenol | | 88-75-5 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 4-Nitrophenol | | 100-02-7 | 180 UJ | 310 UJ | 230 UJ | 430 UJ | 1800 U | 53 U | 150 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Pentachlorophenol | | 87-86-5 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Phenol | | 108-95-2 | 7.1 UJ | 12 UJ | 9.2 UJ | 17 UJ | 72 U | 2.1 U | 5.8 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 35 UJ | 61 UJ | 45 UJ | 84 UJ | 350 U | 10 U | 29 UJ |
| Total SVOCs | | TSVOC | **713.7** | **601.7** | **780.8** | **2642.3** | **16266** | **267.76** | **358.8** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1248 | | 12672-29-6 | **34 J** | **4.6 J** | **8.4 J** | **8.1 J** | **1.9 J** | 0.25 U | **3.7 J** |
| Aroclor 1254 | | 11097-69-1 | **20 J** | **6.5 J** | **9.6 J** | **9 J** | **2.1 J** | **0.1 J** | **5.7 J** |
| Aroclor 1260 | | 11096-82-5 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.87 UJ | 0.78 UJ | 0.57 UJ | 0.51 UJ | 0.36 U | 0.25 U | 0.75 UJ |
| Total PCBs | | 1336-36-3 | **54** | **11.1** | **18** | **17.1** | **4** | **0.1** | **9.4** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **15000 J** | NA | **21000 J** | NA | NA | **47** | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **4400 J** | NA | **37000 J** | NA | NA | **25 J** | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **13000 J** | NA | **18000 J** | NA | NA | **34 J** | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **270 J** | NA | **310 J** | NA | NA | **2.5 J** | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **8700 J** | NA | **77000 J** | NA | NA | **40** | NA |
| Total HxCDF | | 55684-94-1 | **9400 J** | NA | **13000 J** | NA | NA | **30** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **1000 J** | NA | **1600 J** | NA | NA | **4.3 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | **18 J** | NA | **15 J** | NA | NA | 54 U | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **2100 J** | NA | **14000 J** | NA | NA | **12** | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **1800 J** | NA | **2800 J** | NA | NA | **8.4 J** | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **94 J** | NA | **130 J** | NA | NA | 54 U | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **220 J** | NA | **1800 J** | NA | NA | 54 U | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **130 J** | NA | **760 J** | NA | NA | 54 U | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **320 J** | NA | **380 J** | NA | NA | **1.4 J** | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **8400 J** | NA | **920 J** | NA | NA | **23 J** | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **34000 J** | NA | **170000 J** | NA | NA | **150** | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **5600 J** | NA | **6700 J** | NA | NA | **19** | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **340 J** | NA | **430 J** | NA | NA | **1.9 J** | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **790 J** | NA | **660 J** | NA | NA | **2.9** | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **81 J** | NA | **78 J** | NA | NA | 54 U | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **590 J** | NA | **830 J** | NA | NA | **3.0 J** | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **4200 J** | NA | **5500 J** | NA | NA | **19** | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **540 J** | NA | **390 J** | NA | NA | 11 U | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **210 J** | NA | **290 J** | NA | NA | **4.0 J** | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **43 J** | NA | **53 J** | NA | NA | 11 U | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.087 UJ | **0.078 JN** | **0.18 JN** | **0.22 J** | 0.036 U | 0.025 UJ | 0.075 UJ |
| alpha-bhc | | 319-84-6 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | **0.13 J** | 0.025 UJ | 0.075 UJ |
| beta-BHC | | 319-85-7 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED19 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED18(0.67-1.97) | GPECSED18(1.97-3.28) | GPECSED18(3.28-6.56) | GPECSED18(6.56-9.48) | GPECSED18(9.48-10.75) | GPECSED18(10.75-15.5NSU) | GPECSED19(0-0.33) |
| | | Start Depth | 0.67 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 15.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | **0.059 J** | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| delta-BHC | | 319-86-8 | 0.087 UJ | 0.078 UJ | **0.16 J** | **0.1 J** | 0.036 U | 0.025 UJ | **0.077 JN** |
| alpha-chlordane | | 5103-71-9 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.087 UJ | 0.078 UJ | 0.057 UJ | **0.2 JN** | **0.17 J** | 0.025 UJ | 0.075 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.087 UJ | 0.078 UJ | **0.079 J** | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.19 JN** | **0.16 JN** | **0.27 JN** | **0.29 JN** | **0.27** | 0.025 UJ | **0.14 JN** |
| o,p'-DDE | | 3424-82-6 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| 4,4'-DDE | | 72-55-9 | **0.12 JN** | **0.15 JN** | **0.26 JN** | **0.32 JN** | **0.11 J** | 0.025 UJ | **0.14 JN** |
| o,p'-DDT | | 789-02-6 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| 4,4'-DDT | | 50-29-3 | **0.47 J** | **0.33 J** | **0.53 J** | **0.56 J** | 0.036 U | 0.025 UJ | **0.39 J** |
| Dieldrin | | 60-57-1 | **0.1 JN** | 0.078 UJ | **0.19 JN** | **0.37 J** | 0.036 U | 0.025 UJ | 0.075 UJ |
| Endosulfan I | | 959-98-8 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Endosulfan II | | 33213-65-9 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.087 UJ | 0.078 UJ | **0.064 JN** | 0.051 UJ | **0.14 J** | 0.025 UJ | 0.075 UJ |
| Endrin | | 72-20-8 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Endrin ketone | | 53494-70-5 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Heptachlor | | 76-44-8 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.087 UJ | 0.078 UJ | **0.11 JN** | **0.074 JN** | 0.036 U | 0.025 UJ | **0.077 JN** |
| Hexachlorobenzene | | 118-74-1 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 UJ | 0.025 UJ | 0.075 UJ |
| Methoxychlor | | 72-43-5 | 0.17 UJ | **0.22 JN** | 0.11 UJ | 0.1 UJ | 0.071 U | 0.049 UJ | 0.15 UJ |
| Mirex | | 2385-85-5 | 0.087 UJ | 0.078 UJ | 0.057 UJ | 0.051 UJ | 0.036 UJ | 0.025 UJ | 0.075 UJ |
| Mitotane | | 53-19-0 | 0.087 UJ | **0.39 J** | 0.057 UJ | 0.051 UJ | 0.036 U | 0.025 UJ | 0.075 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.087 UJ | 0.078 UJ | **0.069 JN** | **0.065 JN** | 0.036 U | 0.025 UJ | 0.075 UJ |
| trans-Nonachlor | | 39765-80-5 | 3.5 UJ | 3.1 UJ | **0.47 J** | 2.1 UJ | 1.4 UJ | 0.98 UJ | 3 UJ |
| Toxaphene | | 8001-35-2 | 3.5 UJ | 3.1 UJ | 2.3 UJ | 2.1 UJ | 1.4 U | 0.98 UJ | 3 UJ |
| Total Pesticides | | TPEST | **0.939** | **1.328** | **2.382** | **2.199** | **0.82** | ND | **0.824** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | **0.000065 J** | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | **0.000073 J** | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.0013** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.0017** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.0046** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.00026 J** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.0035** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | **0.00066** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.0013** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | **0.00083** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.00051** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | **0.000069 J** | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | 0.00049 UJ | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | **0.000076 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.00067** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | **0.0023 J** | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | 0.00049 U | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.002** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | **0.00037 J** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.0005** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.12 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.020783** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 35 UJ | 31 UJ | 23 UJ | 22 UJ | 15 U | 10 U | 31 UJ |
| 2,4-D | | 94-75-7 | 0.35 UJ | 0.31 UJ | 0.23 UJ | **0.021 J** | 0.15 U | 0.1 U | 0.31 UJ |
| 2,4-DB | | 94-82-6 | 0.35 UJ | 0.31 UJ | 0.23 UJ | 0.22 UJ | 0.15 U | 0.1 U | 0.31 UJ |
| Dicamba | | 1918-00-9 | 0.18 UJ | 0.16 UJ | 0.11 UJ | 0.11 UJ | **0.032 J** | 0.052 U | 0.15 UJ |
| Dichloroprop | | 120-36-5 | 0.35 UJ | 0.31 UJ | 0.23 UJ | 0.22 UJ | 0.15 U | 0.1 U | 0.31 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.4 UJ | 0.35 UJ | 0.26 UJ | 0.25 UJ | 0.16 U | 0.12 U | 0.35 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED18 | GPEC-SED19 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED18(0.67-1.97) | GPECSED18(1.97-3.28) | GPECSED18(3.28-6.56) | GPECSED18(6.56-9.48) | GPECSED18(9.48-10.75) | GPECSED18(10.75-15.5NSU) | GPECSED19(0-0.33) |
| | | Start Depth | 0.67 | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 0 |
| | | End Depth | 1.97 | 3.28 | 6.56 | 9.48 | 10.75 | 15.5 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/22/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.053 UJ | 0.047 UJ | 0.034 UJ | 0.033 UJ | 0.022 UJ | 0.016 UJ | 0.046 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 35 UJ | 31 UJ | 23 UJ | 22 UJ | 15 U | 10 U | 31 UJ |
| Silvex | | 93-72-1 | 0.088 UJ | 0.078 UJ | 0.057 UJ | 0.055 UJ | 0.036 U | 0.026 U | 0.077 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.088 UJ | 0.078 UJ | 0.057 UJ | 0.055 UJ | 0.036 U | 0.026 U | 0.077 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00044 UJ | 0.0036 UJ | 0.00029 UJ | 0.00028 UJ | 0.00018 UJ | 0.00013 UJ | **0.00078 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **18200 J** | **18000 J** | **15800 J** | **14000 J** | **8200** | **15000** | **14500 J** |
| Antimony | | 7440-36-0 | **6.8 J** | **8.2 J** | **13.2 J** | **21.0 J** | **16.9** | **0.53** | **8.6 J** |
| Arsenic | | 7440-38-2 | **112 J** | **127 J** | **170 J** | **238 J** | **273 J** | **19.9 J** | **85 J** |
| Barium | | 7440-39-3 | **247 J** | **253 J** | **297 J** | **314 J** | **252 J** | **147 J** | **204 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1.2 J** | **1.2 J** | **1.2 J** | **0.87** | **0.76** | **1 J** |
| Cadmium | | 7440-43-9 | **90.6 J** | **117 J** | **155 J** | **202 J** | **18.1** | **1.2 J** | **68.1 J** |
| Calcium | | 7440-70-2 | **17100 J** | **17000 J** | **17400 J** | **17800 J** | **9310** | **10900** | **15400 J** |
| Chromium | | 7440-47-3 | **753 J** | **914 J** | **1550 J** | **1400 J** | **183** | **39.8 J** | **500 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **29.8 J** | **34.2 J** | **45.9 J** | **53.8 J** | **19** | **12.8 J** | **23.8 J** |
| Copper | | 7440-50-8 | **5620 J** | **6900 J** | **8700 J** | **10400 J** | **8640** | **219 J** | **6600 J** |
| Iron | | 7439-89-6 | **41200 J** | **42600 J** | **37200 J** | **39400 J** | **26000** | **27400 J** | **32500 J** |
| Lead | | 7439-92-1 | **1260 J** | **1560 J** | **1610 J** | **1620 J** | **981** | **67.9 J** | **1110 J** |
| Magnesium | | 7439-95-4 | **14200 J** | **12000 J** | **8790 J** | **7350 J** | **3930** | **10700** | **11200 J** |
| Manganese | | 7439-96-5 | **331 J** | **313 J** | **267 J** | **253 J** | **169 J** | **466 J** | **267 J** |
| Mercury | | 7439-97-6 | **3.41 J** | **7 J** | **7.32 J** | **7.06 J** | **2.71** | **0.336** | **3.82 J** |
| Nickel | | 7440-02-0 | **935 J** | **1160 J** | **1940 J** | **3080 J** | **1860** | **69.7 J** | **782 J** |
| Potassium | | 7440-09-7 | **3890 J** | **3640 J** | **3040 J** | **2750 J** | **1650** | **4400** | **3630 J** |
| Selenium | | 7782-49-2 | **11 J** | **14.4 J** | **13.9 J** | **14.6 J** | **20.4 J** | **2.3 J** | **6.3 J** |
| Silver | | 7440-22-4 | **29.1 J** | **38.2 J** | **49.8 J** | **42.9 J** | **12.2 J** | **0.56 J** | **24.1 J** |
| Sodium | | 7440-23-5 | **25600 J** | **21600 J** | **14300 J** | **13000 J** | **6170** | **1420** | **21800 J** |
| Thallium | | 7440-28-0 | **0.79 J** | **0.89 J** | **0.77 J** | **0.87 J** | **2.1** | **0.47 J** | **0.7 J** |
| Tin | | 7440-31-5 | **95.6 J** | **113 J** | **118 J** | **137 J** | **91.6** | **4** | **81.3 J** |
| Vanadium | | 7440-62-2 | **108 J** | **159 J** | **90.5 J** | **99.4 J** | **37.1** | **35.9 J** | **81.9 J** |
| Zinc | | 7440-66-6 | **5480 J** | **6400 J** | **10800 J** | **11700 J** | **3700** | **171 J** | **4150 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.2 J** | **3.5 J** | **7.6 J** | **8.5 J** | **6.7 J** | 0.65 UJ | **0.82 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **1310 J** | **983 J** | **1180 J** | **1660 J** | **636** | 32.7 U | 97.8 UJ |
| Black Carbon | | BC | **8840 J** | **7730 J** | **11100 J** | **16000 J** | **90600 J** | **13200 J** | **5260 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.74 J** | **2.9 J** | **2.5 J** | **2.5 J** | **1.4 J** | **1.1 J** | **0.71 J** |
| pH (s.u.) | | pH | **7.4 J** | **7.6 J** | **7.7 J** | **7.8 J** | **7.8 J** | **8.2 J** | **8.1 J** |
| Sulfide | | 18496-25-8 | **10300 J** | **10900 J** | **14900 J** | **9370 J** | **3450 J** | **230 J** | **5900 J** |
| Total Kjeldahl Nitrogen | | TKN | **6470 J** | **7710 J** | **9140 J** | **10900 J** | **6940** | **1140** | **6160 J** |
| Total Nitrogen | | 7727-37-9 | **6470 J** | **7710 J** | **9140 J** | **10900 J** | **6940** | **1140** | **6160 J** |
| Total Organic Carbon | | TOC | **103000 J** | **105000 J** | **121000 J** | **156000 J** | **325000 J** | **16600 J** | **104000 J** |
| Total Phosphorous | | 7723-14-0 | **45.1 J** | **157 J** | **49.7 J** | **148 J** | **566 J** | **9 J** | **344 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED19(0.33-0.66) | GPECSED19(0.66-1.97) | GPECSED19(1.97-3.28) | GPECSED19(3.28-6.56) | GPECSED19(6.56-7.3) | GPECSED19(7.3-12.9)NSU | GPECSED20(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 12.9 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 0.73 UJ | 0.75 UJ | **0.19 J** | **0.23 J** | **0.71 J** | NA | NA |
| Toluene | | 108-88-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | **0.12 J** | **2.2 J** | NA | NA |
| Ethylbenzene | | 100-41-4 | **0.15 J** | **0.25 J** | **0.36 J** | **0.44 J** | **5.3 J** | NA | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.31 J** | **0.64 J** | **1.9 J** | **2.6 J** | **10 J** | NA | NA |
| Total BTEX | | TBTEX | **0.46** | **0.89** | **2.45** | **3.39** | **18.21** | NA | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 2.9 UJ | 3 UJ | 2.9 UJ | **1 J** | 2.4 UJ | NA | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Bromodichloromethane | | 75-27-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Bromoform | | 75-25-2 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Bromomethane | | 74-83-9 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 2-Butanone | | 78-93-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Carbon disulfide | | 75-15-0 | 0.73 UJ | **0.16 J** | **0.36 J** | **0.22 J** | 0.6 UJ | NA | NA |
| Carbon tetrachloride | | 56-23-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Chlorobenzene | | 108-90-7 | 0.73 UJ | 0.75 UJ | **0.09 J** | 0.66 UJ | **0.12 J** | NA | NA |
| Chloroethane | | 75-00-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Chloroform | | 67-66-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Chloromethane | | 74-87-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Cyclohexane | | 110-82-7 | 0.73 UJ | 0.75 UJ | **0.21 J** | **0.36 J** | 0.6 UJ | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2-Dibromoethane | | 106-93-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2-Dichloroethane | | 107-06-2 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1-Dichloroethene | | 75-35-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2-Dichloropropane | | 78-87-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Isopropyl benzene | | 98-82-8 | 0.73 UJ | 0.75 UJ | **0.097 J** | **0.14 J** | **0.76 J** | NA | NA |
| Methyl acetate | | 79-20-9 | 0.73 UJ | **0.61 J** | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Methylcyclohexane | | 108-87-2 | 0.73 UJ | **0.097 J** | **1 J** | **1.6 J** | **1.7 J** | NA | NA |
| Methylene chloride | | 75-09-2 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Styrene | | 100-42-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Tetrachloroethene | | 127-18-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Trichloroethene | | 79-01-6 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Trichlorofluoromethane | | 75-69-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED19(0.33-0.66) | GPECSED19(0.66-1.97) | GPECSED19(1.97-3.28) | GPECSED19(3.28-6.56) | GPECSED19(6.56-7.3) | GPECSED19(7.3-12.9)NSU | GPECSED20(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 12.9 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.66 UJ | 0.6 UJ | NA | NA |
| Total VOCs | | TVOC | **0.46** | **1.757** | **4.207** | **6.71** | **20.79** | NA | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **7.6 J** | **6.2 J** | **8.7 J** | **9.6 J** | **130 J** | **0.45 J** | **1.8 J** |
| Acenaphthylene | | 208-96-8 | **3.4 J** | **3.4 J** | **5.3 J** | **4.2 J** | **21 J** | 2.1 U | **2 J** |
| Anthracene | | 120-12-7 | **7.5 J** | **9.4 J** | **15 J** | **18 J** | **96 J** | **0.58 J** | **2.8 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **4.7 J** | **3 J** | **5.4 J** | **5.5 J** | **27 J** | 2.1 U | **6 J** |
| Fluoranthene | | 206-44-0 | **19 J** | **19 J** | **23 J** | **27 J** | **120 J** | **1.6 J** | **10 J** |
| Fluorene | | 86-73-7 | **5.7 J** | **6.7 J** | **13 J** | **15 J** | **95 J** | **0.36 J** | 6.6 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **15 J** | **17 J** | **42 J** | **60 J** | **360 J** | **0.81 J** | **1.8 J** |
| Naphthalene | | 91-20-3 | **15 J** | **12 J** | **13 J** | **18 J** | **660 J** | **2.6** | **4.3 J** |
| Phenanthrene | | 85-01-8 | **39 J** | **40 J** | **77 J** | **99 J** | **340 J** | **1.5 J** | **3.4 J** |
| Pyrene | | 129-00-0 | **31 J** | **32 J** | **40 J** | **61 J** | **260 J** | **2.5** | **19 J** |
| Benz[a]anthracene | | 56-55-3 | **11 J** | **12 J** | **15 J** | **20 J** | **100 J** | **1.3 J** | **8.3 J** |
| Benzo[a]pyrene | | 50-32-8 | **7.2 J** | **7.9 J** | **9.2 J** | **12 J** | **68 J** | **0.9 J** | **7.2 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **8.5 J** | **8.5 J** | **9.7 J** | **13 J** | **63 J** | **1.2 J** | **8.7 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Chrysene | | 218-01-9 | **14 J** | **15 J** | **16 J** | **21 J** | **85 J** | **1 J** | **7.6 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | **6.9 J** | 2.1 UJ | 6.6 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **4.6 J** | **3.8 J** | **2.9 J** | **3.7 J** | **19 J** | 2.1 U | **3.7 J** |
| Total PAHs | | TPAH | **193.2** | **195.9** | **295.2** | **387** | **2450.9** | **14.8** | **86.6** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **2.9 J** | **2.8 J** | **6 J** | **6.4 J** | **34 J** | 10 U | 32 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **110 J** | **110 J** | **100 J** | **74 J** | **14 J** | **11 J** | **140 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Caprolactam | | 105-60-2 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| Carbazole | | 86-74-8 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | **4.6 J** | 2.1 U | 6.6 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 4-Chloroaniline | | 106-47-8 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| 2-Chlorophenol | | 95-57-8 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Dibenzofuran | | 132-64-9 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | **21 J** | 10 U | 32 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Diethyl phthalate | | 84-66-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Dimethyl phthalate | | 131-11-3 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 1,4-Dioxane | | 123-91-1 | 47 UJ | 45 UJ | 43 UJ | 42 UJ | 110 UJ | 21 U | 66 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Hexachlorobutadiene | | 87-68-3 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Location Name** | **GPEC-SED19** | **GPEC-SED19** | **GPEC-SED19** | **GPEC-SED19** | **GPEC-SED19** | **GPEC-SED19** | **GPEC-SED20** |
| | | **Sample Name** | **GPECSED19(0.33-0.66)** | **GPECSED19(0.66-1.97)** | **GPECSED19(1.97-3.28)** | **GPECSED19(3.28-6.56)** | **GPECSED19(6.56-7.3)** | **GPECSED19(7.3-12.9)NSU** | **GPECSED20(0-0.33)** |
| | | **Start Depth** | **0.33** | **0.66** | **1.97** | **3.28** | **6.56** | **7.3** | **0** |
| | | **End Depth** | **0.66** | **1.97** | **3.28** | **6.56** | **7.3** | **12.9** | **0.33** |
| | | **Depth Unit** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| | | **Sample Date** | **6/24/2010** | **6/24/2010** | **6/24/2010** | **6/24/2010** | **6/24/2010** | **6/24/2010** | **6/24/2010** |
| | | **Parent Sample Code** | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 UJ | 32 UJ |
| Hexachloroethane | | 67-72-1 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Isophorone | | 78-59-1 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2-Methylphenol | | 95-48-7 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2-Nitroaniline | | 88-74-4 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| 3-Nitroaniline | | 99-09-2 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| 4-Nitroaniline | | 100-01-6 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| Nitrobenzene | | 98-95-3 | 47 UJ | 45 UJ | 43 UJ | 42 UJ | 110 UJ | 21 U | 66 UJ |
| 2-Nitrophenol | | 88-75-5 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 4-Nitrophenol | | 100-02-7 | 120 UJ | 120 UJ | 110 UJ | 110 UJ | 290 UJ | 53 U | 170 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Pentachlorophenol | | 87-86-5 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Phenol | | 108-95-2 | 4.7 UJ | 4.5 UJ | 4.3 UJ | 4.3 UJ | 12 UJ | 2.1 U | 6.6 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 23 UJ | 22 UJ | 21 UJ | 21 UJ | 57 UJ | 10 U | 32 UJ |
| Total SVOCs | | TSVOC | **306.1** | **308.7** | **401.2** | **467.4** | **2524.5** | **25.8** | **226.6** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1248 | | 12672-29-6 | **9.6 J** | **9.2 J** | **3.9 J** | **2.1 J** | **0.92 J** | 0.26 U | **2.3 J** |
| Aroclor 1254 | | 11097-69-1 | **11 J** | **9.9 J** | **6 J** | **4 J** | **1.2 J** | **0.067 J** | **2.9 J** |
| Aroclor 1260 | | 11096-82-5 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.58 UJ | 0.6 UJ | 0.54 UJ | 0.53 UJ | 0.46 UJ | 0.26 U | 0.79 UJ |
| Total PCBs | | 1336-36-3 | **20.6** | **19.1** | **9.9** | **6.1** | **2.12** | **0.067** | **5.2** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | **0.29 J** | **0.21 JN** | **0.1 J** | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| alpha-bhc | | 319-84-6 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | **0.024 J** | **0.016 J** | 0.079 UJ |
| beta-BHC | | 319-85-7 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |

| | | Location Name | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED19(0.33-0.66) | GPECSED19(0.66-1.97) | GPECSED19(1.97-3.28) | GPECSED19(3.28-6.56) | GPECSED19(6.56-7.3) | GPECSED19(7.3-12.9)NSU | GPECSED20(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 12.9 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| delta-BHC | | 319-86-8 | **0.15 JN** | **0.2 JN** | **0.076 JN** | **0.061 JN** | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| alpha-chlordane | | 5103-71-9 | **0.36 J** | **0.35 J** | **0.22 J** | **0.17 JN** | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.54 J** | 0.06 UJ | **0.33 J** | **0.3 J** | 0.046 UJ | 0.026 UJ | **0.13 J** |
| oxy-Chlordane | | 27304-13-8 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.19 JN** | **0.22 JN** | **0.18 JN** | **0.15 JN** | **0.061 JN** | 0.026 UJ | 0.079 UJ |
| o,p'-DDE | | 3424-82-6 | **0.15 JN** | **0.11 JN** | **0.091 JN** | **0.23 J** | **0.029 J** | **0.0035 J** | 0.079 UJ |
| 4,4'-DDE | | 72-55-9 | **0.24 JN** | **0.3 JN** | **0.44 JN** | **0.33 JN** | **0.067 JN** | 0.026 UJ | 0.079 UJ |
| o,p'-DDT | | 789-02-6 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | **0.17 J** |
| 4,4'-DDT | | 50-29-3 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | **0.2 J** |
| Dieldrin | | 60-57-1 | 0.058 UJ | **0.2 JN** | **0.42 J** | **0.27 J** | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endosulfan I | | 959-98-8 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endosulfan II | | 33213-65-9 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endosulfan sulfate | | 1031-07-8 | **0.072 JN** | 0.06 UJ | **0.059 JN** | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endrin | | 72-20-8 | **0.25 J** | **0.23 J** | **0.22 J** | **0.15 J** | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Endrin ketone | | 53494-70-5 | 0.058 UJ | 0.06 UJ | **0.072 JN** | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Heptachlor | | 76-44-8 | **0.18 JN** | **0.18 JN** | **0.084 JN** | **0.12 J** | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Heptachlor epoxide | | 1024-57-3 | **0.1 JN** | **0.14 JN** | **0.053 JN** | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.058 UJ | 0.06 UJ | **0.054 J** | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Methoxychlor | | 72-43-5 | 0.12 UJ | 0.12 UJ | 0.11 UJ | **0.3 J** | **0.12 J** | 0.052 UJ | 0.16 UJ |
| Mirex | | 2385-85-5 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| Mitotane | | 53-19-0 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.058 UJ | 0.06 UJ | 0.053 UJ | 0.053 UJ | 0.046 UJ | 0.026 UJ | 0.079 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.3 UJ | 2.4 UJ | 2.1 UJ | 2.1 UJ | 1.8 UJ | 1 UJ | 3.2 UJ |
| Toxaphene | | 8001-35-2 | 2.3 UJ | 2.4 UJ | 2.1 UJ | 2.1 UJ | 1.8 UJ | 1 UJ | 3.2 UJ |
| Total Pesticides | | TPEST | **2.522** | **2.14** | **2.399** | **2.081** | **0.301** | **0.0195** | **0.5** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | **0.00009 J** | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | **0.000044 J** | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.00093** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.0013** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.0082** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.00029** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.0028** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.00053** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | **0.0013** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.00048** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | **0.00014 J** | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | **0.000036 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.0015** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | 0.00028 U | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | **0.000017 J** | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.003** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | **0.00017 J** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.00031** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.071 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.021137** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 23 UJ | 24 UJ | 23 UJ | 21 UJ | 19 UJ | 11 U | 33 UJ |
| 2,4-D | | 94-75-7 | 0.23 UJ | 0.24 UJ | 0.23 UJ | 0.21 UJ | 0.19 UJ | 0.11 U | 0.33 UJ |
| 2,4-DB | | 94-82-6 | 0.23 UJ | 0.24 UJ | 0.23 UJ | 0.21 UJ | 0.19 UJ | 0.11 U | 0.33 UJ |
| Dicamba | | 1918-00-9 | 0.11 UJ | 0.12 UJ | 0.12 UJ | 0.11 UJ | 0.095 UJ | 0.053 U | 0.16 UJ |
| Dichloroprop | | 120-36-5 | 0.23 UJ | 0.24 UJ | 0.23 UJ | 0.21 UJ | 0.19 UJ | 0.11 U | 0.33 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.26 UJ | 0.27 UJ | 0.26 UJ | 0.24 UJ | 0.21 UJ | 0.12 U | 0.37 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED19 | GPEC-SED20 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED19(0.33-0.66) | GPECSED19(0.66-1.97) | GPECSED19(1.97-3.28) | GPECSED19(3.28-6.56) | GPECSED19(6.56-7.3) | GPECSED19(7.3-12.9)NSU | GPECSED20(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 12.9 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.034 UJ | 0.036 UJ | 0.035 UJ | 0.032 UJ | 0.029 UJ | 0.016 U | 0.049 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 23 UJ | 24 UJ | **8.8 J** | 21 UJ | **36 J** | 11 U | 33 UJ |
| Silvex | | 93-72-1 | 0.057 UJ | 0.06 UJ | 0.058 UJ | 0.053 UJ | 0.048 UJ | 0.027 U | 0.082 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.057 UJ | 0.06 UJ | 0.058 UJ | 0.053 UJ | 0.048 UJ | 0.027 U | 0.082 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | R | R | **0.00037 J** | 0.00027 UJ | **0.00016 J** | 0.00013 U | **0.00046 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **14900 J** | **15600 J** | **15800 J** | **15900 J** | **11100 J** | **15800** | **13400 J** |
| Antimony | | 7440-36-0 | **17.2 J** | **24 J** | **29.8 J** | **23.7 J** | **27.7 J** | 0.13 UJ | **5.9 J** |
| Arsenic | | 7440-38-2 | **212 J** | **288 J** | **243 J** | **340 J** | **395 J** | **3.2 J** | **67.6 J** |
| Barium | | 7440-39-3 | **346 J** | **412 J** | **355 J** | **342 J** | **315 J** | **145 J** | **177 J** |
| Beryllium | | 7440-41-7 | **1.3 J** | **1.4 J** | **1.5 J** | **1.6 J** | **0.89 J** | **0.86 J** | **0.9 J** |
| Cadmium | | 7440-43-9 | **179 J** | **285 J** | **198 J** | **47.4 J** | **21.2 J** | **0.3 J** | **52.6 J** |
| Calcium | | 7440-70-2 | **18900 J** | **19500 J** | **21300 J** | **24400 J** | **12900 J** | **13900 J** | **12500 J** |
| Chromium | | 7440-47-3 | **1330 J** | **1430 J** | **1310 J** | **524 J** | **247 J** | **38.8 J** | **396 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **72.5 J** | **99 J** | **78.5 J** | **35.4 J** | **30.8 J** | **13.4 J** | **20.3 J** |
| Copper | | 7440-50-8 | **11600 J** | **13800 J** | **11700 J** | **12800 J** | **15400 J** | **65 J** | **4180 J** |
| Iron | | 7439-89-6 | **40600 J** | **43400 J** | **43100 J** | **41800 J** | **38200 J** | **30500 J** | **28600 J** |
| Lead | | 7439-92-1 | **1690 J** | **1860 J** | **1860 J** | **1610 J** | **982 J** | **14.8** | **916 J** |
| Magnesium | | 7439-95-4 | **8250 J** | **8360 J** | **8310 J** | **6680 J** | **6040 J** | **13500** | **9870 J** |
| Manganese | | 7439-96-5 | **269 J** | **275 J** | **319 J** | **333 J** | **284 J** | **547 J** | **241 J** |
| Mercury | | 7439-97-6 | **7.93 J** | **7 J** | **6.48 J** | **6.91 J** | **4.3 J** | **0.147 J** | **2.82 J** |
| Nickel | | 7440-02-0 | **2520 J** | **3690 J** | **3660 J** | **2630 J** | **3190 J** | **42.1 J** | **576 J** |
| Potassium | | 7440-09-7 | **2960 J** | **3070 J** | **3110 J** | **2710 J** | **2380 J** | **5510 J** | **3350 J** |
| Selenium | | 7782-49-2 | **16.9 J** | **14.1 J** | **12.7 J** | **16.6 J** | **34.6 J** | **0.69 J** | **7.5 J** |
| Silver | | 7440-22-4 | **42.9 J** | **49.1 J** | **51.2 J** | **22.1 J** | **15.1 J** | **0.11** | **19.8 J** |
| Sodium | | 7440-23-5 | **15600 J** | **16500 J** | **15900 J** | **12500 J** | **9670 J** | **2130** | **19200 J** |
| Thallium | | 7440-28-0 | **0.68 J** | **0.7 J** | **0.77 J** | **1.4 J** | **1.4 J** | **0.36** | **0.67 J** |
| Tin | | 7440-31-5 | **120 J** | **145 J** | **153 J** | **155 J** | **110 J** | 0.33 UJ | **64.9 J** |
| Vanadium | | 7440-62-2 | **108 J** | **121 J** | **126 J** | **86.4 J** | **52.2 J** | **45.4 J** | **71 J** |
| Zinc | | 7440-66-6 | **11000 J** | **12700 J** | **12900 J** | **6390 J** | **3950 J** | **84.1 J** | **3010 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **9.1 J** | **21.4 J** | **9.6 J** | **13.4 J** | **8.2 J** | 0.66 U | **0.58 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **300 J** | **1190 J** | **1150 J** | **967 J** | **795 J** | 33.2 U | 102 UJ |
| Black Carbon | | BC | **4720 J** | **5060 J** | **3900 J** | **5250 J** | **22800 J** | **3860 J** | **6040 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.53 J** | **0.70 J** | **1.2 J** | **2.3 J** | **0.72 J** | **0.77 J** | 4.1 UJ |
| pH (s.u.) | | pH | **7.9 J** | **7.8 J** | **7.8 J** | **8.0 J** | **8.0 J** | **8.1 J** | **7.6 J** |
| Sulfide | | 18496-25-8 | **9660 J** | **10200 J** | **7180 J** | **3980 J** | **1200 J** | **79.6 J** | **5190 J** |
| Total Kjeldahl Nitrogen | | TKN | **5570 J** | **8570 J** | **14700 J** | **7450 J** | **5970 J** | 199 UJ | **6330 J** |
| Total Nitrogen | | 7727-37-9 | **5570 J** | **8570 J** | **14700 J** | **7450 J** | **5970 J** | 50.0 UJ | **6330 J** |
| Total Organic Carbon | | TOC | **127000 J** | **145000 J** | **150000 J** | **135000 J** | **178000 J** | **27100 J** | **103000 J** |
| Total Phosphorous | | 7723-14-0 | **5350 J** | **5450 J** | **4500 J** | **7540 J** | **1010 J** | **32.8 J** | **995 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED20(0.33-0.66) | GPECSED20(0.66-1.97) | GPECSED20(1.97-3.28) | GPECSED20(3.28-6.56) | GPECSED20(6.56-8.33) | GPECSED20(8.33-12.0)NSU | GPECSED21(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 12 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Toluene | | 108-88-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | NA | 0.56 UJ | **0.1 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | NA | **0.37 J** | **0.58 J** | NA |
| Total BTEX | | TBTEX | NA | NA | NA | NA | **0.37** | **0.68** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | NA | **0.84 J** | 1.3 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Bromoform | | 75-25-2 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Bromomethane | | 74-83-9 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | NA | **0.2 J** | 0.32 U | NA |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Chloroethane | | 75-00-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Chloroform | | 67-66-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Chloromethane | | 74-87-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | 0.56 UJ | **0.27 J** | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | **0.36 J** | **0.05 J** | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | **0.32 J** | **1.2** | NA |
| Methylene chloride | | 75-09-2 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Styrene | | 100-42-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | 0.56 UJ | 0.32 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Trichloroethene | | 79-01-6 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED20(0.33-0.66) | GPECSED20(0.66-1.97) | GPECSED20(1.97-3.28) | GPECSED20(3.28-6.56) | GPECSED20(6.56-8.33) | GPECSED20(8.33-12.0)NSU | GPECSED21(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 12 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | NA | 0.56 UJ | 0.32 U | NA |
| Total VOCs | | TVOC | NA | NA | NA | NA | **2.09** | **2.2** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **4 J** | **12 J** | **11 J** | **27 J** | **61 J** | **12** | **1.4 J** |
| Acenaphthylene | | 208-96-8 | **2.3 J** | **3.1 J** | **3 J** | **7.4 J** | **9.6 J** | **1.5 J** | **1.3 J** |
| Anthracene | | 120-12-7 | **4.2 J** | **8.6 J** | **9.5 J** | **19 J** | **33 J** | **5.3** | **1.8 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **5.9 J** | **5.9 J** | **6.5 J** | **11 J** | **13 J** | **1.6 J** | **3.7 J** |
| Fluoranthene | | 206-44-0 | **14 J** | **22 J** | **25 J** | **33 J** | **44 J** | **5.5** | **8.3 J** |
| Fluorene | | 86-73-7 | 6.2 UJ | **3.5 J** | **6 J** | **12 J** | 3.4 UJ | **5.6** | 6.9 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **2.1 J** | **3.6 J** | **7.6 J** | **6.5 J** | **3.8 J** | **29** | **2.1 J** |
| Naphthalene | | 91-20-3 | **3.2 J** | **4.5 J** | **5.4 J** | **22 J** | **7.4 J** | **89** | **4.9 J** |
| Phenanthrene | | 85-01-8 | **3.7 J** | **13 J** | **31 J** | **57 J** | **13 J** | **19** | **3.5 J** |
| Pyrene | | 129-00-0 | **29 J** | **47 J** | **51 J** | **56 J** | **93 J** | **12** | **14 J** |
| Benz[a]anthracene | | 56-55-3 | **11 J** | **19 J** | **21 J** | **25 J** | **41 J** | **4.2** | **5.8 J** |
| Benzo[a]pyrene | | 50-32-8 | **8.2 J** | **12 J** | **11 J** | **19 J** | **30 J** | **3.1** | **5.5 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **7.6 J** | **12 J** | **15 J** | **19 J** | **26 J** | **2.9** | **7.8 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Chrysene | | 218-01-9 | **11 J** | **16 J** | **17 J** | **26 J** | **37 J** | **4.1** | **6.1 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 6.2 UJ | 5.7 UJ | 5.7 UJ | **2.2 J** | **2.4 J** | 2 U | **0.88 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3.8 J** | **3.9 J** | **4.8 J** | **6.7 J** | **8.9 J** | **0.93 J** | **2.1 J** |
| Total PAHs | | TPAH | **110** | **186.1** | **224.8** | **348.8** | **423.1** | **195.73** | **69.18** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | **3 J** | 34 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **150 J** | **300 J** | **500 J** | **390 J** | **59 J** | **2.2 J** | **84** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Caprolactam | | 105-60-2 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| Carbazole | | 86-74-8 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | **0.24 J** | 6.9 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 4-Chloroaniline | | 106-47-8 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| 2-Chlorophenol | | 95-57-8 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Dibenzofuran | | 132-64-9 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | **1 J** | 34 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Diethyl phthalate | | 84-66-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Dimethyl phthalate | | 131-11-3 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 1,4-Dioxane | | 123-91-1 | 62 UJ | 57 UJ | 57 UJ | 56 UJ | 34 UJ | 20 U | 68 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Hexachlorobutadiene | | 87-68-3 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED20(0.33-0.66) | GPECSED20(0.66-1.97) | GPECSED20(1.97-3.28) | GPECSED20(3.28-6.56) | GPECSED20(6.56-8.33) | GPECSED20(8.33-12.0)NSU | GPECSED21(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 12 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 UJ | 34 UJ |
| Hexachloroethane | | 67-72-1 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Isophorone | | 78-59-1 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2-Methylphenol | | 95-48-7 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2-Nitroaniline | | 88-74-4 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| 3-Nitroaniline | | 99-09-2 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| 4-Nitroaniline | | 100-01-6 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| Nitrobenzene | | 98-95-3 | 62 UJ | 57 UJ | 57 UJ | 56 UJ | 34 UJ | 20 U | 68 UJ |
| 2-Nitrophenol | | 88-75-5 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 4-Nitrophenol | | 100-02-7 | 160 UJ | 150 UJ | 140 UJ | 140 UJ | 86 UJ | 52 U | 170 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Pentachlorophenol | | 87-86-5 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Phenol | | 108-95-2 | 6.2 UJ | 5.7 UJ | 5.7 UJ | 5.6 UJ | 3.4 UJ | 2 U | 6.9 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 31 UJ | 28 UJ | 28 UJ | 28 UJ | 17 UJ | 10 U | 34 UJ |
| Total SVOCs | | TSVOC | **260** | **486.1** | **724.8** | **738.8** | **482.1** | **202.17** | **153.18** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1248 | | 12672-29-6 | **3.3 J** | **3.9 J** | **3.7 J** | **4.8 J** | **3 J** | **0.047 J** | **1.9 J** |
| Aroclor 1254 | | 11097-69-1 | **4.7 J** | **5.3 J** | **4.7 J** | **5.7 J** | **4.3 J** | **0.069 J** | **3 J** |
| Aroclor 1260 | | 11096-82-5 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.77 UJ | 0.7 UJ | 0.7 UJ | 0.66 UJ | 0.45 UJ | 0.25 U | 0.85 UJ |
| Total PCBs | | 1336-36-3 | **8** | **9.2** | **8.4** | **10.5** | **7.3** | **0.116** | **4.9** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | **11000 J** | NA | NA | **19000 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | **2700 J** | NA | NA | **3100 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | **8600 J** | NA | NA | **16000 J** | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | **210 J** | NA | NA | **300 J** | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | **5500 J** | NA | NA | **6400 J** | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | **6700 J** | NA | NA | **12000 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | **750 J** | NA | NA | **1500 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | **10 J** | NA | NA | **12 J** | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | **1800 J** | NA | NA | **1600 J** | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | **1400 J** | NA | NA | **2600 J** | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | **62 J** | NA | NA | **53 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | **170 J** | NA | NA | **170 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | **140 J** | NA | NA | **120 J** | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | **260 J** | NA | NA | **330 J** | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | **6300 J** | NA | NA | **11000 J** | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | **22000 J** | NA | NA | **29000 J** | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | **4500 J** | NA | NA | **8300 J** | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | **220 J** | NA | NA | **350 J** | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | **890 J** | NA | NA | **680 J** | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | **68 J** | NA | NA | **63 J** | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | **400 J** | NA | NA | **830 J** | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | **3400 J** | NA | NA | **5800 J** | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | **500 J** | NA | NA | **430 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | **140 J** | NA | NA | **250 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | **26 J** | NA | NA | **51 J** | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.076 UJ | 0.07 UJ | 0.07 UJ | **0.095 JN** | **0.056 JN** | 0.025 UJ | 0.085 UJ |
| alpha-bhc | | 319-84-6 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| beta-BHC | | 319-85-7 | 0.076 UJ | **0.17 J** | **0.14 J** | **0.12 JN** | **0.071 JN** | 0.025 UJ | 0.085 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED20(0.33-0.66) | GPECSED20(0.66-1.97) | GPECSED20(1.97-3.28) | GPECSED20(3.28-6.56) | GPECSED20(6.56-8.33) | GPECSED20(8.33-12.0)NSU | GPECSED21(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 12 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| delta-BHC | | 319-86-8 | 0.076 UJ | **0.084 J** | **0.074 JN** | **0.071 JN** | **0.073 J** | 0.025 UJ | 0.085 UJ |
| alpha-chlordane | | 5103-71-9 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.13 J** | **0.16 J** | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.076 UJ | 0.07 UJ | **0.071 JN** | **0.076 JN** | **0.24 J** | 0.025 UJ | 0.085 UJ |
| o,p'-DDE | | 3424-82-6 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| 4,4'-DDE | | 72-55-9 | **0.12 JN** | **0.14 JN** | **0.13 JN** | **0.17 JN** | **0.23 JN** | 0.025 UJ | 0.085 UJ |
| o,p'-DDT | | 789-02-6 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | **0.036 J** |
| 4,4'-DDT | | 50-29-3 | **0.26 J** | **0.32 J** | **0.29 J** | **0.37 J** | **0.28 J** | 0.025 UJ | 0.085 UJ |
| Dieldrin | | 60-57-1 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | **0.17 J** | 0.025 UJ | 0.085 UJ |
| Endosulfan I | | 959-98-8 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Endosulfan II | | 33213-65-9 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | **0.049 JN** | 0.025 UJ | 0.085 UJ |
| Endrin | | 72-20-8 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | **0.054 J** |
| Endrin aldehyde | | 7421-93-4 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Endrin ketone | | 53494-70-5 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | **0.13 JN** | 0.025 UJ | 0.085 UJ |
| Heptachlor | | 76-44-8 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.076 UJ | **0.071 JN** | **0.07 JN** | **0.078 JN** | **0.051 JN** | 0.025 UJ | **0.036 J** |
| Hexachlorobenzene | | 118-74-1 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| Methoxychlor | | 72-43-5 | 0.15 UJ | 0.14 UJ | 0.14 UJ | 0.13 UJ | **0.51 J** | 0.051 UJ | 0.17 UJ |
| Mirex | | 2385-85-5 | 0.076 UJ | 0.07 UJ | 0.07 UJ | **0.03 J** | **0.12 J** | 0.025 UJ | 0.085 UJ |
| Mitotane | | 53-19-0 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.076 UJ | 0.07 UJ | 0.07 UJ | 0.066 UJ | 0.045 UJ | 0.025 UJ | 0.085 UJ |
| trans-Nonachlor | | 39765-80-5 | 3 UJ | 2.8 UJ | 2.8 UJ | 2.6 UJ | 1.8 UJ | 1 UJ | 3.4 UJ |
| Toxaphene | | 8001-35-2 | 3 UJ | 2.8 UJ | 2.8 UJ | 2.6 UJ | 1.8 UJ | 1 UJ | 3.4 UJ |
| Total Pesticides | | TPEST | **0.51** | **0.945** | **0.775** | **1.01** | **1.98** | ND | **0.126** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | **0.00011 J** | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | **0.00021 J** | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.00048 J** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.0006 J** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.0064 J** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.00022 J** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.0021 J** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | **0.0015 J** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | **0.00017 J** | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.00071 J** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | **0.0013 J** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.0009 J** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | **0.00028 J** | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | **0.00054 J** | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | **0.00053 J** | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | **0.000092 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.0018** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | **0.27 J** | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.0038** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | 0.0018 U | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.00014 J** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.091 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.291882** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 32 UJ | 29 UJ | 28 UJ | 28 UJ | 18 UJ | 10 U | 34 UJ |
| 2,4-D | | 94-75-7 | 0.32 UJ | 0.29 UJ | 0.28 UJ | 0.28 UJ | 0.18 UJ | 0.1 U | 0.34 UJ |
| 2,4-DB | | 94-82-6 | 0.32 UJ | 0.29 UJ | 0.28 UJ | 0.28 UJ | 0.18 UJ | 0.1 U | 0.34 UJ |
| Dicamba | | 1918-00-9 | 0.16 UJ | 0.15 UJ | 0.14 UJ | 0.14 UJ | 0.089 UJ | 0.051 U | 0.17 UJ |
| Dichloroprop | | 120-36-5 | 0.32 UJ | 0.29 UJ | 0.28 UJ | 0.28 UJ | 0.18 UJ | 0.1 U | 0.34 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.35 UJ | 0.33 UJ | 0.32 UJ | 0.31 UJ | 0.2 UJ | 0.11 U | 0.38 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED20 | GPEC-SED21 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED20(0.33-0.66) | GPECSED20(0.66-1.97) | GPECSED20(1.97-3.28) | GPECSED20(3.28-6.56) | GPECSED20(6.56-8.33) | GPECSED20(8.33-12.0)NSU | GPECSED21(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 8.33 | 12 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.047 UJ | 0.044 UJ | 0.043 UJ | 0.042 UJ | 0.027 UJ | 0.015 UJ | 0.051 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 32 UJ | 29 UJ | 28 UJ | 28 UJ | 18 UJ | 10 U | 34 UJ |
| Silvex | | 93-72-1 | 0.079 UJ | 0.073 UJ | 0.071 UJ | 0.07 UJ | 0.045 UJ | 0.025 U | 0.085 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.079 UJ | 0.073 UJ | 0.071 UJ | 0.07 UJ | 0.045 UJ | 0.025 U | 0.085 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | **0.00022 J** | R | R | R | **0.00017 J** | 0.00013 UJ | **0.00089 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **16000 J** | **16900 J** | **19900 J** | **18800 J** | **9400 J** | **2690** | **12200 J** |
| Antimony | | 7440-36-0 | **6.9 J** | **10.4 J** | **11.8 J** | **14.5 J** | **19.2 J** | 0.13 UJ | **4.4 J** |
| Arsenic | | 7440-38-2 | **78 J** | **115 J** | **145 J** | **164 J** | **163 J** | **1.6 J** | **39.2 J** |
| Barium | | 7440-39-3 | **220 J** | **260 J** | **269 J** | **277 J** | **451 J** | **21 J** | **162 J** |
| Beryllium | | 7440-41-7 | **1 J** | **1.2 J** | **1.4 J** | **1.4 J** | **0.88 J** | **0.16 J** | **0.76 J** |
| Cadmium | | 7440-43-9 | **57.8 J** | **84.5 J** | **104 J** | **119 J** | **104 J** | **0.72 J** | **32.4 J** |
| Calcium | | 7440-70-2 | **15300 J** | **18400 J** | **21200 J** | **22000 J** | **15200 J** | **14400 J** | **12800 J** |
| Chromium | | 7440-47-3 | **477 J** | **677 J** | **829 J** | **918 J** | **898 J** | **11.7** | **268 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **23.3 J** | **29 J** | **36.2 J** | **39.3 J** | **35.1 J** | **2.8** | **14.1 J** |
| Copper | | 7440-50-8 | **4550 J** | **6270 J** | **7900 J** | **8660 J** | **7320 J** | **45.5** | **2680 J** |
| Iron | | 7439-89-6 | **38000 J** | **41400 J** | **45900 J** | **44800 J** | **30300 J** | **7120** | **26800 J** |
| Lead | | 7439-92-1 | **977 J** | **1310 J** | **1510 J** | **1630 J** | **1970 J** | **10.9** | **595 J** |
| Magnesium | | 7439-95-4 | **10600 J** | **10900 J** | **13300 J** | **9240 J** | **4110 J** | **6400** | **10700 J** |
| Manganese | | 7439-96-5 | **310 J** | **345 J** | **390 J** | **373 J** | **406 J** | **152** | **219 J** |
| Mercury | | 7439-97-6 | **1.32 J** | **3.75 J** | **1.93 J** | **0.958 J** | **4.36 J** | **0.0103 J** | **2.03 J** |
| Nickel | | 7440-02-0 | **642 J** | **961 J** | **1240 J** | **1460 J** | **1890 J** | **15.5 J** | **359 J** |
| Potassium | | 7440-09-7 | **3370 J** | **2880 J** | **3020 J** | **2580 J** | **1470 J** | **640 J** | **3480 J** |
| Selenium | | 7782-49-2 | **8.1 J** | **10.8 J** | **12.7 J** | **14.3 J** | **8.7 J** | 0.32 UJ | **3.8 J** |
| Silver | | 7440-22-4 | **22.4 J** | **29.5 J** | **34.9 J** | **39.9 J** | **24.5 J** | **0.2 J** | **13.7 J** |
| Sodium | | 7440-23-5 | **5330 J** | **2240 J** | **3340 J** | **1290 J** | **630 J** | **136** | **24600 J** |
| Thallium | | 7440-28-0 | **0.77 J** | **0.85 J** | **0.87 J** | **0.9 J** | **0.54 J** | **0.071** | **0.49 J** |
| Tin | | 7440-31-5 | **73.7 J** | **86.6 J** | **107 J** | **117 J** | **99.1 J** | 0.32 U | **51.6 J** |
| Vanadium | | 7440-62-2 | **83.6 J** | **106 J** | **138 J** | **140 J** | **65.9 J** | **10.7** | **58.1 J** |
| Zinc | | 7440-66-6 | **3690 J** | **5180 J** | **5950 J** | **6980 J** | **6310 J** | **45.9 J** | **1760 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **1.2 J** | **2.3 J** | **3.2 J** | **4.2 J** | **3.5 J** | **0.29 J** | **0.52 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 98.5 UJ | **575 J** | **542 J** | **521 J** | 55.9 UJ | 31.7 U | 107 UJ |
| Black Carbon | | BC | **10800 J** | **10400 J** | **11200 J** | **12900 J** | **11500 J** | **5420 J** | **6420 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 3.9 UJ | **1.2 J** | **1.0 J** | **1.7 J** | **1.3 J** | 1.3 U | 4.3 UJ |
| pH (s.u.) | | pH | **7.8 J** | **7.7 J** | **7.7 J** | **7.7 J** | **8.1 J** | **8.3 J** | **7.7 J** |
| Sulfide | | 18496-25-8 | **5550 J** | **6800 J** | **7060 J** | **5440 J** | **2900 J** | **91.4 J** | **4010 J** |
| Total Kjeldahl Nitrogen | | TKN | **6310 J** | **6860 J** | **5690 J** | **6690 J** | **9620 J** | 190 UJ | **4560 J** |
| Total Nitrogen | | 7727-37-9 | **6310 J** | **6860 J** | **5690 J** | **6690 J** | **9620 J** | 50.0 UJ | **4560 J** |
| Total Organic Carbon | | TOC | **107000 J** | **116000 J** | **122000 J** | **139000 J** | **137000 J** | **14400 J** | **94500 J** |
| Total Phosphorous | | 7723-14-0 | **167 J** | **2960 J** | **1500 J** | **5960 J** | **477 J** | **276 J** | **1870 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED22 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED21(0.33-0.66) | GPECSED21(0.66-1.97) | GPECSED21(1.97-3.28) | GPECSED21(3.28-4.5) | GPEC-XX-062510 | GPECSED21(4.5-9.6)NSU | GPECSED22(0-0.33) |
| | | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 | 4.5 | 0 |
| | | | End Depth | 0.66 | 1.97 | 3.28 | 4.5 | 4.5 | 9.6 | 0.33 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/24/2010 |
| | | | Parent Sample Code | | | | | GPEC-SED-21(3.28-4.5) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | | |
| Benzene | | 71-43-2 | NA | 0.67 UJ | **0.58 J** | NA | NA | 0.0069 U | NA | |
| Toluene | | 108-88-3 | NA | 0.67 UJ | **0.21 J** | NA | NA | 0.0069 U | NA | |
| Ethylbenzene | | 100-41-4 | NA | **0.13 J** | **0.9** | NA | NA | 0.0069 U | NA | |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA | |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA | |
| Total Xylene | | 1330-20-7 | NA | **0.82 J** | **3.9 J** | NA | NA | **0.0053 J** | NA | |
| Total BTEX | | TBTEX | NA | **0.95** | **5.59** | NA | NA | **0.0053** | NA | |
| **Other VOCs** | mg/kg | | | | | | | | | |
| Acetone | | 67-64-1 | NA | **0.95 J** | 2.8 UJ | NA | NA | 0.028 UJ | NA | |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA | |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA | |
| Bromochloromethane | | 74-97-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Bromodichloromethane | | 75-27-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Bromoform | | 75-25-2 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Bromomethane | | 74-83-9 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 2-Butanone | | 78-93-3 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| Carbon disulfide | | 75-15-0 | NA | 0.67 UJ | **0.26 J** | NA | NA | 0.0069 U | NA | |
| Carbon tetrachloride | | 56-23-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Chlorobenzene | | 108-90-7 | NA | **0.15 J** | **0.51 J** | NA | NA | 0.0069 U | NA | |
| Chloroethane | | 75-00-3 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Chloroform | | 67-66-3 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Chloromethane | | 74-87-3 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Cyclohexane | | 110-82-7 | NA | 0.67 UJ | **0.3 J** | NA | NA | 0.0069 U | NA | |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| Dibromochloromethane | | 124-48-1 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,2-Dibromoethane | | 106-93-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | 0.67 UJ | **0.14 J** | NA | NA | 0.0069 U | NA | |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | 0.67 UJ | **0.089 J** | NA | NA | 0.0069 U | NA | |
| Dichlorodifluoromethane | | 75-71-8 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| 1,1-Dichloroethane | | 75-34-3 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,2-Dichloroethane | | 107-06-2 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,1-Dichloroethene | | 75-35-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,2-Dichloropropane | | 78-87-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Hexanone | | 591-78-6 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Isopropyl benzene | | 98-82-8 | NA | 0.67 UJ | **0.2 J** | NA | NA | 0.0069 U | NA | |
| Methyl acetate | | 79-20-9 | NA | 0.67 UJ | **0.7 J** | NA | NA | 0.0069 U | NA | |
| Methyl tert-butyl ether | | 1634-04-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Methylcyclohexane | | 108-87-2 | NA | **0.86 J** | **1.2 J** | NA | NA | **0.0015 J** | NA | |
| Methylene chloride | | 75-09-2 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Styrene | | 100-42-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Tetrachloroethene | | 127-18-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Trichloroethene | | 79-01-6 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Trichlorofluoromethane | | 75-69-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED22 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED21(0.33-0.66) | GPECSED21(0.66-1.97) | GPECSED21(1.97-3.28) | GPECSED21(3.28-4.5) | GPEC-XX-062510 | GPECSED21(4.5-9.6)NSU | GPECSED22(0-0.33) |
| | | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 | 4.5 | 0 |
| | | | End Depth | 0.66 | 1.97 | 3.28 | 4.5 | 4.5 | 9.6 | 0.33 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/24/2010 |
| | | | Parent Sample Code | | | | | GPEC-SED-21(3.28-4.5) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA | |
| Vinyl acetate | | 108-05-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 UJ | NA | |
| Vinyl chloride | | 75-01-4 | NA | 0.67 UJ | 0.71 UJ | NA | NA | 0.0069 U | NA | |
| Total VOCs | | TVOC | NA | **2.91** | **8.989** | NA | NA | **0.0068** | NA | |
| **PAHs** | mg/kg | | | | | | | | | |
| Acenaphthene | | 83-32-9 | **7.2 J** | **9.8 J** | **9.7 J** | **14** | **13 J** | **24** | **1.4 J** | |
| Acenaphthylene | | 208-96-8 | **3.8 J** | **4.3 J** | **5.1 J** | **3.5** | **2.5 J** | **3.4** | **0.86 J** | |
| Anthracene | | 120-12-7 | **12 J** | **16 J** | **7.7 J** | **18** | **11 J** | **12** | **2.1 J** | |
| Benzo[g,h,i]perylene | | 191-24-2 | **4 J** | **6.5 J** | **5.6 J** | **5.4** | **4.3 J** | **2.9** | **3.3 J** | |
| Fluoranthene | | 206-44-0 | **18 J** | **25 J** | **25 J** | **29 J** | **16 J** | **11** | **9.2 J** | |
| Fluorene | | 86-73-7 | **11 J** | **11 J** | **15 J** | **13** | **8.7 J** | **12** | **0.73 J** | |
| 2-Methylnaphthalene | | 91-57-6 | **35 J** | **37 J** | **52 J** | **37** | **33 J** | **62** | **0.64 J** | |
| Naphthalene | | 91-20-3 | **15 J** | **25 J** | **29 J** | **48** | **73 J** | **190** | **1.4 J** | |
| Phenanthrene | | 85-01-8 | **63 J** | **69 J** | **100 J** | **63** | **40 J** | **40** | **3.8 J** | |
| Pyrene | | 129-00-0 | **42 J** | **53 J** | **57 J** | **51 J** | **30 J** | **26** | **15 J** | |
| Benz[a]anthracene | | 56-55-3 | **13 J** | **19 J** | **18 J** | **20 J** | **11 J** | **8.8** | **6.7 J** | |
| Benzo[a]pyrene | | 50-32-8 | **7.2 J** | **12 J** | **10 J** | **12** | **7.8 J** | **7.1** | **4.6 J** | |
| Benzo[b]fluoranthene | | 205-99-2 | **8.8 J** | **13 J** | **11 J** | **12** | **7.5 J** | **6.1** | **7 J** | |
| Benzo[k]fluoranthene | | 207-08-9 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| Chrysene | | 218-01-9 | **14 J** | **19 J** | **18 J** | **16** | **11 J** | **9.1** | **6.1 J** | |
| Dibenz[a,h]anthracene | | 53-70-3 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | **0.8 J** | **1.1 J** | |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **2.2 J** | **3.9 J** | **3.9 J** | **3.2** | **2.1 J** | **1.8 J** | **2.1 J** | |
| Total PAHs | | TPAH | **256.2** | **323.5** | **367** | **345.1** | **270.9** | **417** | **66.03** | |
| **Other SVOCs** | mg/kg | | | | | | | | | |
| Acetophenone | | 98-86-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA | |
| Atrazine | | 1912-24-9 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA | |
| Benzaldehyde | | 100-52-7 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA | |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA | |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA | |
| 1,1-Biphenyl | | 92-52-4 | **4.6 J** | **4.5 J** | **5.6 J** | **3.5 J** | **3.2 J** | **5.5 J** | 25 UJ | |
| Bis(chloroisopropyl)ether | | 108-60-1 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| Bis(2-chloroethyl)ether | | 111-44-4 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **80 J** | **35 J** | **90 J** | **2.9 J** | 36 UJ | 22 U | **85 J** | |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Butyl benzyl phthalate | | 85-68-7 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Caprolactam | | 105-60-2 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ | |
| Carbazole | | 86-74-8 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | **0.46 J** | 5 UJ | |
| 4-Chloro-3-methylphenol | | 59-50-7 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 4-Chloroaniline | | 106-47-8 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 2-Chloronaphthalene | | 91-58-7 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| 2-Chlorophenol | | 95-57-8 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Dibenzofuran | | 132-64-9 | 23 UJ | 21 UJ | 22 UJ | **4.3 J** | **2.5 J** | **2.2 J** | 25 UJ | |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA | |
| 3,3-Dichlorobenzidine | | 91-94-1 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 2,4-Dichlorophenol | | 120-83-2 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| Diethyl phthalate | | 84-66-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Dimethyl phthalate | | 131-11-3 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 2,4-Dimethylphenol | | 105-67-9 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| Di-n-butyl phthalate | | 84-74-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ | |
| 2,4-Dinitrophenol | | 51-28-5 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ | |
| 2,4-Dinitrotoluene | | 121-14-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 2,6-Dinitrotoluene | | 606-20-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 1,4-Dioxane | | 123-91-1 | 46 UJ | 42 UJ | 45 UJ | 24 U | 36 UJ | 22 U | 50 UJ | |
| Di-n-octyl phthalate | | 117-84-0 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ | |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA | |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA | |
| Hexachlorobenzene | | 118-74-1 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |
| Hexachlorobutadiene | | 87-68-3 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ | |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **Location Name** | **GPEC-SED21** | **GPEC-SED21** | **GPEC-SED21** | **GPEC-SED21** | **GPEC-SED21** | **GPEC-SED21** | **GPEC-SED22** |
| | | **Sample Name** | **GPECSED21(0.33-0.66)** | **GPECSED21(0.66-1.97)** | **GPECSED21(1.97-3.28)** | **GPECSED21(3.28-4.5)** | **GPEC-XX-062510** | **GPECSED21(4.5-9.6)NSU** | **GPECSED22(0-0.33)** |
| | | **Start Depth** | **0.33** | **0.66** | **1.97** | **3.28** | **3.28** | **4.5** | **0** |
| | | **End Depth** | **0.66** | **1.97** | **3.28** | **4.5** | **4.5** | **9.6** | **0.33** |
| | | **Depth Unit** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** | **ft** |
| | | **Sample Date** | **6/25/2010** | **6/25/2010** | **6/25/2010** | **6/25/2010** | **6/25/2010** | **6/25/2010** | **6/24/2010** |
| | | **Parent Sample Code** | | | | | **GPEC-SED-21(3.28-4.5)** | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 23 UJ | 21 UJ | 22 UJ | 12 UJ | 18 UJ | 11 UJ | 25 UJ |
| Hexachloroethane | | 67-72-1 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| Isophorone | | 78-59-1 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 2-Methylphenol | | 95-48-7 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 2-Nitroaniline | | 88-74-4 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ |
| 3-Nitroaniline | | 99-09-2 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ |
| 4-Nitroaniline | | 100-01-6 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ |
| Nitrobenzene | | 98-95-3 | 46 UJ | 42 UJ | 45 UJ | 24 U | 36 UJ | 22 U | 50 UJ |
| 2-Nitrophenol | | 88-75-5 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 4-Nitrophenol | | 100-02-7 | 120 UJ | 110 UJ | 120 UJ | 60 U | 91 UJ | 55 U | 130 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| Pentachlorophenol | | 87-86-5 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| Phenol | | 108-95-2 | 4.6 UJ | 4.2 UJ | 4.5 UJ | 2.4 U | 3.6 UJ | 2.2 U | 5 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 23 UJ | 21 UJ | 22 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| Total SVOCs | | TSVOC | **340.8** | **363** | **462.6** | **355.8** | **276.6** | **425.16** | **151.03** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1248 | | 12672-29-6 | **3.4 J** | **1.8 J** | **2.3 J** | **0.14 J** | **0.23 J** | 0.26 U | **2.1 J** |
| Aroclor 1254 | | 11097-69-1 | **5.4 J** | **3.2 J** | **4.4 J** | **0.43 J** | **0.42 J** | 0.26 U | **3.6 J** |
| Aroclor 1260 | | 11096-82-5 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.58 UJ | 0.5 UJ | 0.53 UJ | 0.3 U | 0.45 UJ | 0.26 U | 0.62 UJ |
| Total PCBs | | 1336-36-3 | **8.8** | **5** | **6.7** | **0.57** | **0.65** | ND | **5.7** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | **0.063 JN** | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| alpha-bhc | | 319-84-6 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| beta-BHC | | 319-85-7 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |

| | | Location Name | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED22 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED21(0.33-0.66) | GPECSED21(0.66-1.97) | GPECSED21(1.97-3.28) | GPECSED21(3.28-4.5) | GPEC-XX-062510 | GPECSED21(4.5-9.6)NSU | GPECSED22(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 | 4.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.5 | 4.5 | 9.6 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-21(3.28-4.5) | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| delta-BHC | | 319-86-8 | **0.11 J** | **0.058 J** | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| alpha-chlordane | | 5103-71-9 | **0.21 J** | **0.14 J** | **0.2 J** | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| gamma-Chlordane | | 5103-74-2 | **0.24 J** | **0.15 J** | **0.2 J** | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.13 JN** | **0.075 JN** | **0.16 JN** | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| o,p'-DDE | | 3424-82-6 | **0.081 JN** | **0.065 JN** | **0.062 J** | 0.03 UJ | **0.0096 J** | 0.026 UJ | 0.062 UJ |
| 4,4'-DDE | | 72-55-9 | **0.29 JN** | **0.19 JN** | **0.25 JN** | 0.03 UJ | **0.041 J** | 0.026 UJ | **0.071 JN** |
| o,p'-DDT | | 789-02-6 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| 4,4'-DDT | | 50-29-3 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Dieldrin | | 60-57-1 | **0.18 J** | **0.091 JN** | **0.31 J** | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Endosulfan I | | 959-98-8 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Endosulfan II | | 33213-65-9 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Endrin | | 72-20-8 | **0.17 J** | **0.1 J** | **0.14 J** | 0.03 UJ | 0.045 UJ | 0.026 UJ | **0.12 J** |
| Endrin aldehyde | | 7421-93-4 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Endrin ketone | | 53494-70-5 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Heptachlor | | 76-44-8 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Methoxychlor | | 72-43-5 | 0.12 UJ | 0.1 UJ | 0.11 UJ | 0.06 UJ | 0.089 UJ | 0.051 UJ | 0.12 UJ |
| Mirex | | 2385-85-5 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| Mitotane | | 53-19-0 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.058 UJ | 0.05 UJ | 0.053 UJ | 0.03 UJ | 0.045 UJ | 0.026 UJ | 0.062 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.3 UJ | 2 UJ | 2.1 UJ | 1.2 UJ | 1.8 UJ | 1 UJ | 2.5 UJ |
| Toxaphene | | 8001-35-2 | 2.3 UJ | 2 UJ | 2.1 UJ | 1.2 UJ | 1.8 UJ | 1 UJ | 2.5 UJ |
| Total Pesticides | | TPEST | **1.474** | **0.869** | **1.322** | ND | **0.0506** | ND | **0.191** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | 0.00044 U | 0.0052 UJ | 0.00037 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | **0.00021 J** | 0.0052 UJ | **0.00011 J** | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000049 J** | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | **0.0022** | **0.011 J** | **0.0029** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | **0.0038 J** | **0.016 J** | **0.0038** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | 0.00044 U | 0.0052 UJ | 0.00037 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | **0.0081** | **0.017 J** | **0.0041** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | **0.0048** | **0.0097 J** | **0.00068** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | **0.036 J** | **0.075 J** | **0.008** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000087 J** | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | **0.0022 J** | **0.005 J** | **0.00047** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | 0.00044 U | 0.0052 UJ | 0.00037 U | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | **0.003 J** | **0.014 J** | **0.0045** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | **0.0022** | 0.0052 UJ | **0.0015** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | 0.00093 U | 0.0052 UJ | **0.00057** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000023 J** | NA |
| Endrin | | 72-20-8 | NA | NA | NA | **0.00046 J** | 0.0052 UJ | **0.00019 J** | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | 0.00044 U | 0.0052 UJ | 0.00037 U | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | 0.00071 U | 0.0052 UJ | 0.00037 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000061 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000015 J** | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | 0.00044 U | 0.0052 UJ | 0.00037 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | **0.0076** | **0.014 J** | **0.0024** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | **0.22 J** | **0.041 J** | 0.00037 U | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | 0.00044 U | 0.0052 UJ | **0.000064 J** | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | **0.0052 J** | **0.017 J** | **0.0028** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | 0.00044 U | **0.0056 J** | **0.00058** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | **0.00077** | **0.0036 J** | **0.00083** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | 0.11 U | 0.13 UJ | 0.093 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | **0.29654** | **0.2289** | **0.033729** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 24 UJ | 21 UJ | 23 UJ | 12 U | 18 UJ | 11 U | 25 UJ |
| 2,4-D | | 94-75-7 | 0.24 UJ | 0.21 UJ | 0.23 UJ | 0.12 U | 0.18 UJ | 0.11 UJ | 0.25 UJ |
| 2,4-DB | | 94-82-6 | 0.24 UJ | 0.21 UJ | 0.23 UJ | 0.12 U | 0.18 UJ | 0.11 UJ | 0.25 UJ |
| Dicamba | | 1918-00-9 | 0.12 UJ | 0.11 UJ | 0.11 UJ | 0.061 U | 0.089 UJ | 0.055 UJ | 0.12 UJ |
| Dichloroprop | | 120-36-5 | 0.24 UJ | 0.21 UJ | 0.23 UJ | 0.12 U | 0.18 UJ | 0.11 UJ | 0.25 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.27 UJ | 0.24 UJ | 0.25 UJ | 0.14 U | 0.2 UJ | 0.12 UJ | 0.28 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED21 | GPEC-SED22 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED21(0.33-0.66) | GPECSED21(0.66-1.97) | GPECSED21(1.97-3.28) | GPECSED21(3.28-4.5) | GPEC-XX-062510 | GPECSED21(4.5-9.6)NSU | GPECSED22(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 3.28 | 4.5 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 4.5 | 4.5 | 9.6 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/24/2010 |
| | | Parent Sample Code | | | | | GPEC-SED-21(3.28-4.5) | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.035 UJ | 0.032 UJ | 0.034 UJ | 0.018 UJ | 0.027 UJ | 0.017 UJ | 0.037 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | **9.5 J** | 21 UJ | **8.4 J** | 12 U | 18 UJ | 11 UJ | 25 UJ |
| Silvex | | 93-72-1 | 0.059 UJ | 0.053 UJ | 0.056 UJ | 0.031 U | 0.045 UJ | 0.028 U | 0.062 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.059 UJ | **0.0096 J** | 0.056 UJ | 0.031 U | 0.045 UJ | 0.028 UJ | 0.062 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | **0.00011 J** | R | R | R | R | 0.00014 U | **0.001 J** |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **12800 J** | **12300 J** | **12400 J** | **7840** | **11000 J** | **17700** | **11500 J** |
| Antimony | | 7440-36-0 | **33.1 J** | **35.5 J** | **33.7 J** | **24.1 J** | **39.2 J** | **0.19 J** | **4.9 J** |
| Arsenic | | 7440-38-2 | **287 J** | **310 J** | **292 J** | **277 J** | **513 J** | **5.2 J** | **44.4 J** |
| Barium | | 7440-39-3 | **328 J** | **335 J** | **262 J** | **382 J** | **490 J** | **183 J** | **214 J** |
| Beryllium | | 7440-41-7 | **1.2 J** | **1.2 J** | **1.3 J** | **0.53 J** | **0.81 J** | **0.98 J** | **0.7 J** |
| Cadmium | | 7440-43-9 | **131 J** | **99.2 J** | **134 J** | **8.7 J** | **20.3 J** | **0.44 J** | **34.7 J** |
| Calcium | | 7440-70-2 | **27700 J** | **31500 J** | **30300 J** | **7150 J** | **12700 J** | **11500 J** | **13900 J** |
| Chromium | | 7440-47-3 | **975 J** | **806 J** | **873 J** | **113 J** | **211 J** | **42.8 J** | **274 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **41 J** | **37 J** | **42.5 J** | **16.8** | **23.7 J** | **14.9 J** | **13.6 J** |
| Copper | | 7440-50-8 | **13400 J** | **16800 J** | **17400 J** | **5030 J** | **9240 J** | **74.5 J** | **3110 J** |
| Iron | | 7439-89-6 | **43400 J** | **42200 J** | **46000 J** | **22500** | **36200 J** | **34800 J** | **23900 J** |
| Lead | | 7439-92-1 | **1400 J** | **1410 J** | **1410 J** | **724 J** | **1220 J** | **19.9 J** | **567 J** |
| Magnesium | | 7439-95-4 | **7460 J** | **6750 J** | **6940 J** | **3800** | **5400 J** | **14100** | **9910 J** |
| Manganese | | 7439-96-5 | **433 J** | **435 J** | **304 J** | **232 J** | **475 J** | **616 J** | **240 J** |
| Mercury | | 7439-97-6 | **4.18 J** | **5.79 J** | **5.58 J** | **4.61 J** | **5.93 J** | **0.0392 J** | **1.77 J** |
| Nickel | | 7440-02-0 | **4320 J** | **3750 J** | **4590 J** | **913 J** | **1850 J** | **48.4 J** | **371 J** |
| Potassium | | 7440-09-7 | **2810 J** | **2700 J** | **2730 J** | **1720 J** | **2290 J** | **6090 J** | **2880 J** |
| Selenium | | 7782-49-2 | **15.8 J** | **17 J** | **14 J** | **45.6 J** | **42.9 J** | **0.79 J** | **3.5 J** |
| Silver | | 7440-22-4 | **38.5 J** | **31.2 J** | **35.5 J** | **13 J** | **20 J** | **0.18 J** | **14.2 J** |
| Sodium | | 7440-23-5 | **15100 J** | **13100 J** | **12900 J** | **4480 J** | **7690 J** | **1570** | **16100 J** |
| Thallium | | 7440-28-0 | **0.71 J** | **0.76 J** | **0.67 J** | **0.77 J** | **1.3 J** | **0.38 J** | **0.43 J** |
| Tin | | 7440-31-5 | **133 J** | **141 J** | **143 J** | **76** | **122 J** | **1.7 J** | **54.3 J** |
| Vanadium | | 7440-62-2 | **121 J** | **111 J** | **119 J** | **29.3** | **43.4 J** | **49.7 J** | **57.3 J** |
| Zinc | | 7440-66-6 | **9530 J** | **7920 J** | **7050 J** | **2270 J** | **5200 J** | **99.6 J** | **1820 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **5.2 J** | **4.7 J** | **2.3 J** | **0.26 J** | **1.5 J** | 0.69 U | 1.6 UJ |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **411 J** | **1110 J** | **2490 J** | **767 J** | **618 J** | **177 J** | 77.7 UJ |
| Black Carbon | | BC | **5070 J** | **6890 J** | **13500 J** | **7450 J** | **7310 J** | **6820 J** | **7050 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.2 J** | **1.1 J** | **1.3 J** | **0.61 J** | **0.88 J** | **2.2** | **0.43 J** |
| pH (s.u.) | | pH | **7.5 J** | **7.7 J** | **7.5 J** | **8.4 J** | **7.8 J** | **8.5 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **8340 J** | **4800 J** | **5200 J** | **970** | **516 J** | 207 U | **4480 J** |
| Total Kjeldahl Nitrogen | | TKN | **10900 J** | **8840 J** | **9280 J** | **5050 J** | **7640 J** | **1010 J** | **3670 J** |
| Total Nitrogen | | 7727-37-9 | **10900 J** | **8840 J** | **9280 J** | **5050 J** | **7640 J** | **1010 J** | **3670 J** |
| Total Organic Carbon | | TOC | **131000 J** | **136000 J** | **163000 J** | **22900 J** | **32000 J** | **13600 J** | **101000 J** |
| Total Phosphorous | | 7723-14-0 | **1320 J** | **20300 J** | **10000 J** | **3010 J** | **100 J** | **47.4 J** | **283 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED22(0.33-0.66) | GPECSED22(0.66-1.97) | GPECSED22(1.97-3.28) | GPECSED22(3.28-6.56) | GPECSED22(6.56-7.3) | GPECSED22(7.3-13.2)NSU | GPECSED23(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Toluene | | 108-88-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Ethylbenzene | | 100-41-4 | NA | NA | NA | **0.24 J** | **0.12 J** | NA | 1.2 UJ |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | NA | NA | **1.3 J** | **0.78 J** | NA | 3.6 UJ |
| Total BTEX | | TBTEX | NA | NA | NA | **1.54** | **0.9** | NA | ND |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | NA | NA | **0.91 J** | 2.1 UJ | NA | 4.8 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Bromodichloromethane | | 75-27-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Bromoform | | 75-25-2 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Bromomethane | | 74-83-9 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 2-Butanone | | 78-93-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Carbon disulfide | | 75-15-0 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Carbon tetrachloride | | 56-23-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Chlorobenzene | | 108-90-7 | NA | NA | NA | 0.6 UJ | **0.16 J** | NA | 1.2 UJ |
| Chloroethane | | 75-00-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Chloroform | | 67-66-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Chloromethane | | 74-87-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Cyclohexane | | 110-82-7 | NA | NA | NA | 0.6 UJ | **0.22 J** | NA | 1.2 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Dibromochloromethane | | 124-48-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1-Dichloroethene | | 75-35-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2-Dichloropropane | | 78-87-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | **0.088 J** | **0.073 J** | NA | 1.2 UJ |
| Methyl acetate | | 79-20-9 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | **1.5 J** | **0.96 J** | NA | 1.2 UJ |
| Methylene chloride | | 75-09-2 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Styrene | | 100-42-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Tetrachloroethene | | 127-18-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Trichloroethene | | 79-01-6 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED22(0.33-0.66) | GPECSED22(0.66-1.97) | GPECSED22(1.97-3.28) | GPECSED22(3.28-6.56) | GPECSED22(6.56-7.3) | GPECSED22(7.3-13.2)NSU | GPECSED23(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Vinyl chloride | | 75-01-4 | NA | NA | NA | 0.6 UJ | 0.53 UJ | NA | 1.2 UJ |
| Total VOCs | | TVOC | NA | NA | NA | **4.038** | **2.313** | NA | ND |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **1.2 J** | **0.58 J** | **1.9 J** | **6.6 J** | **7.7 J** | **0.4 J** | **3 J** |
| Acenaphthylene | | 208-96-8 | **1.1 J** | **0.9 J** | **1.4 J** | **2.6 J** | **4.1 J** | 2 U | **2.7 J** |
| Anthracene | | 120-12-7 | **2.2 J** | **1.2 J** | **5.6 J** | **9.5 J** | **7.2 J** | **0.55 J** | **5.4 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **4.4 J** | **3.3 J** | **3.7 J** | **6.6 J** | **5.5 J** | 2 U | **6.3 J** |
| Fluoranthene | | 206-44-0 | **11 J** | **6.8 J** | **16 J** | **21 J** | **17 J** | **0.95 J** | **16 J** |
| Fluorene | | 86-73-7 | **1 J** | 4.1 UJ | **2.7 J** | **8.8 J** | **5.8 J** | **0.34 J** | 7.4 UJ |
| 2-Methylnaphthalene | | 91-57-6 | **2 J** | **0.94 J** | **2.5 J** | **11 J** | **4 J** | **0.26 J** | **2.4 J** |
| Naphthalene | | 91-20-3 | **1.8 J** | **1.7 J** | **3.9 J** | **7.1 J** | **4.4 J** | **0.3 J** | 7.4 UJ |
| Phenanthrene | | 85-01-8 | **5 J** | **2.3 J** | **13 J** | **34 J** | **35 J** | **1.8 J** | 7.4 UJ |
| Pyrene | | 129-00-0 | **18 J** | **11 J** | **28 J** | **40 J** | **39 J** | **2.1** | **26 J** |
| Benz[a]anthracene | | 56-55-3 | **8.7 J** | **6.5 J** | **10 J** | **16 J** | **16 J** | **0.87 J** | **11 J** |
| Benzo[a]pyrene | | 50-32-8 | **5.4 J** | **5.3 J** | **6.5 J** | **8.3 J** | **9.6 J** | **0.69 J** | **7.8 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **9.3 J** | **7.6 J** | **8.6 J** | **10 J** | **12 J** | **0.7 J** | **9.9 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Chrysene | | 218-01-9 | **7.7 J** | **6.6 J** | **9.8 J** | **14 J** | **14 J** | **0.63 J** | **12 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | **1.7 J** | **0.76 J** | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 UJ | 7.4 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **2.7 J** | **2.4 J** | **2.3 J** | 7.2 UJ | **3.9 J** | 2 U | **4.9 J** |
| Total PAHs | | TPAH | **83.2** | **57.88** | **115.9** | **195.5** | **185.2** | **9.59** | **107.4** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Bis(chloroisopropyl)ether | | 108-60-1 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **93 J** | **120 J** | **470 J** | **250 J** | **160 J** | **11 J** | **230 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Caprolactam | | 105-60-2 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| Carbazole | | 86-74-8 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 4-Chloroaniline | | 106-47-8 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2-Chloronaphthalene | | 91-58-7 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| 2-Chlorophenol | | 95-57-8 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Dibenzofuran | | 132-64-9 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Diethyl phthalate | | 84-66-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Dimethyl phthalate | | 131-11-3 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 1,4-Dioxane | | 123-91-1 | 56 UJ | 41 UJ | 43 UJ | 72 UJ | 34 UJ | 20 U | 74 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | **3.8 J** | 9.7 U | 36 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Hexachlorobutadiene | | 87-68-3 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED22(0.33-0.66) | GPECSED22(0.66-1.97) | GPECSED22(1.97-3.28) | GPECSED22(3.28-6.56) | GPECSED22(6.56-7.3) | GPECSED22(7.3-13.2)NSU | GPECSED23(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 UJ | 36 UJ |
| Hexachloroethane | | 67-72-1 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Isophorone | | 78-59-1 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2-Methylphenol | | 95-48-7 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2-Nitroaniline | | 88-74-4 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| 3-Nitroaniline | | 99-09-2 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| 4-Nitroaniline | | 100-01-6 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| Nitrobenzene | | 98-95-3 | 56 UJ | 41 UJ | 43 UJ | 72 UJ | 34 UJ | 20 U | 74 UJ |
| 2-Nitrophenol | | 88-75-5 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 4-Nitrophenol | | 100-02-7 | 140 UJ | 100 UJ | 110 UJ | 180 UJ | 86 UJ | 50 U | 190 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Pentachlorophenol | | 87-86-5 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Phenol | | 108-95-2 | 5.6 UJ | 4.1 UJ | 4.3 UJ | 7.2 UJ | 3.4 UJ | 2 U | 7.4 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 28 UJ | 20 UJ | 21 UJ | 35 UJ | 17 UJ | 9.7 U | 36 UJ |
| Total SVOCs | | TSVOC | **176.2** | **177.88** | **585.9** | **445.5** | **349** | **20.59** | **337.4** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1248 | | 12672-29-6 | **1.5 J** | **1.4 J** | **3.2 J** | **6.3 J** | **5.3 J** | 0.23 U | **3 J** |
| Aroclor 1254 | | 11097-69-1 | **2.2 J** | **2.4 J** | **5.4 J** | **6.6 J** | **5.5 J** | **0.046 J** | **4.8 J** |
| Aroclor 1260 | | 11096-82-5 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.66 UJ | 0.54 UJ | 0.55 UJ | 0.48 UJ | 0.42 UJ | 0.23 U | 0.96 UJ |
| Total PCBs | | 1336-36-3 | **3.7** | **3.8** | **8.6** | **12.9** | **10.8** | **0.046** | **7.8** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **4900 J** | NA | NA | NA | **14000 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **2000 J** | NA | NA | NA | **2700 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **3700 J** | NA | NA | NA | **12000 J** | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **120 J** | NA | NA | NA | **210 J** | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **3800 J** | NA | NA | NA | **5400 J** | NA | NA |
| Total HxCDF | | 55684-94-1 | **3100 J** | NA | NA | NA | **9100 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **310 J** | NA | NA | NA | **1000 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | **5.9 J** | NA | NA | NA | **9.9 J** | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **1100 J** | NA | NA | NA | **1300 J** | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **580 J** | NA | NA | NA | **1900 J** | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **47 J** | NA | NA | NA | **44 J** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **110 J** | NA | NA | NA | **140 J** | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **96 J** | NA | NA | NA | **83 J** | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **140 J** | NA | NA | NA | **230 J** | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **2400 J** | NA | NA | NA | **8000 J** | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **15000 J** | NA | NA | NA | **24000 J** | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **2000 J** | NA | NA | NA | **6100 J** | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **120 J** | NA | NA | NA | **260 J** | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **520 J** | NA | NA | NA | **510 J** | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **37 J** | NA | NA | NA | **46 J** | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **170 J** | NA | NA | NA | **590 J** | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **1400 J** | NA | NA | NA | **5100 J** | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **260 J** | NA | NA | NA | **350 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **71 J** | NA | NA | NA | **190 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **13 J** | NA | NA | NA | **36 J** | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.066 UJ | 0.054 UJ | **0.056 JN** | **0.14 J** | **0.11 JN** | 0.023 UJ | 0.096 UJ |
| alpha-bhc | | 319-84-6 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| beta-BHC | | 319-85-7 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED22(0.33-0.66) | GPECSED22(0.66-1.97) | GPECSED22(1.97-3.28) | GPECSED22(3.28-6.56) | GPECSED22(6.56-7.3) | GPECSED22(7.3-13.2)NSU | GPECSED23(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| delta-BHC | | 319-86-8 | 0.066 UJ | 0.054 UJ | 0.055 UJ | **0.095 JN** | **0.11 JN** | 0.023 UJ | 0.096 UJ |
| alpha-chlordane | | 5103-71-9 | **0.053 J** | **0.13 J** | **0.19 J** | **0.15 J** | 0.023 UJ | **0.099 J** | |
| gamma-Chlordane | | 5103-74-2 | **0.12 J** | **0.12 J** | **0.21 J** | 0.048 UJ | 0.042 UJ | 0.023 UJ | **0.19 J** |
| oxy-Chlordane | | 27304-13-8 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.066 UJ | 0.054 UJ | **0.084 JN** | 0.048 UJ | **0.097 JN** | 0.023 UJ | 0.096 UJ |
| o,p'-DDE | | 3424-82-6 | 0.066 UJ | 0.054 UJ | 0.055 UJ | **0.069 JN** | **0.059 JN** | 0.023 UJ | 0.096 UJ |
| 4,4'-DDE | | 72-55-9 | 0.066 UJ | **0.06 JN** | **0.11 JN** | **0.16 JN** | **0.12 JN** | 0.023 UJ | **0.12 JN** |
| o,p'-DDT | | 789-02-6 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| 4,4'-DDT | | 50-29-3 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Dieldrin | | 60-57-1 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Endosulfan I | | 959-98-8 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Endosulfan II | | 33213-65-9 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.066 UJ | 0.054 UJ | 0.055 UJ | **0.049 JN** | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Endrin | | 72-20-8 | **0.049 J** | **0.063 J** | **0.14 J** | **0.25 J** | **0.2 J** | 0.023 UJ | **0.14 J** |
| Endrin aldehyde | | 7421-93-4 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Endrin ketone | | 53494-70-5 | 0.066 UJ | 0.054 UJ | **0.059 JN** | **0.076 JN** | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Heptachlor | | 76-44-8 | 0.066 UJ | 0.054 UJ | 0.055 UJ | **0.11 JN** | **0.094 JN** | 0.023 UJ | 0.096 UJ |
| Heptachlor epoxide | | 1024-57-3 | **0.032 J** | 0.054 UJ | 0.055 UJ | **0.057 JN** | **0.082 JN** | 0.023 UJ | 0.096 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Methoxychlor | | 72-43-5 | 0.13 UJ | 0.11 UJ | 0.11 UJ | 0.097 UJ | 0.085 UJ | 0.046 UJ | 0.19 UJ |
| Mirex | | 2385-85-5 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| Mitotane | | 53-19-0 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.066 UJ | 0.054 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.023 UJ | 0.096 UJ |
| trans-Nonachlor | | 39765-80-5 | 2.6 UJ | 2.2 UJ | 2.2 UJ | 1.9 UJ | 1.7 UJ | 0.92 UJ | 3.8 UJ |
| Toxaphene | | 8001-35-2 | 2.6 UJ | 2.2 UJ | 2.2 UJ | 1.9 UJ | 1.7 UJ | 0.92 UJ | 3.8 UJ |
| Total Pesticides | | TPEST | **0.201** | **0.296** | **0.789** | **1.196** | **1.022** | ND | **0.549** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | **0.000095 J** | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | **0.000041 J** | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | **0.0009** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | **0.0011** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | **0.0014** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | **0.000099 J** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | **0.0013 J** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | **0.000072 J** | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | **0.00023 J** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | **0.00065** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | **0.0015** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | **0.00057** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | **0.000027 J** | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | **0.00017 J** | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | **0.000048 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | **0.000011 J** | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | **0.0016** | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | 0.00038 U | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | **0.000017 J** | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | **0.00053** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | **0.00022 J** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | **0.00045** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | 0.095 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | **0.01103** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 28 UJ | 22 UJ | 22 UJ | 19 UJ | 17 UJ | 10 U | 38 UJ |
| 2,4-D | | 94-75-7 | 0.28 UJ | 0.22 UJ | 0.22 UJ | 0.19 UJ | 0.17 UJ | 0.1 U | 0.38 UJ |
| 2,4-DB | | 94-82-6 | 0.28 UJ | 0.22 UJ | 0.22 UJ | 0.19 UJ | 0.17 UJ | 0.1 U | 0.38 UJ |
| Dicamba | | 1918-00-9 | 0.14 UJ | 0.11 UJ | 0.11 UJ | 0.097 UJ | **0.011 J** | 0.05 U | 0.19 UJ |
| Dichloroprop | | 120-36-5 | 0.28 UJ | 0.22 UJ | 0.22 UJ | **0.042 J** | 0.17 UJ | 0.1 U | 0.38 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.31 UJ | 0.25 UJ | 0.25 UJ | 0.22 UJ | 0.19 UJ | 0.11 U | 0.43 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED22 | GPEC-SED23 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED22(0.33-0.66) | GPECSED22(0.66-1.97) | GPECSED22(1.97-3.28) | GPECSED22(3.28-6.56) | GPECSED22(6.56-7.3) | GPECSED22(7.3-13.2)NSU | GPECSED23(0-0.33) |
| | | Start Depth | 0.33 | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 0 |
| | | End Depth | 0.66 | 1.97 | 3.28 | 6.56 | 7.3 | 13.2 | 0.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/24/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.042 UJ | 0.033 UJ | 0.033 UJ | 0.029 UJ | 0.025 UJ | 0.015 U | 0.057 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 28 UJ | 22 UJ | 22 UJ | **25 J** | 17 UJ | 10 U | 38 UJ |
| Silvex | | 93-72-1 | 0.07 UJ | 0.055 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.025 U | 0.096 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.07 UJ | 0.055 UJ | 0.055 UJ | 0.048 UJ | 0.042 UJ | 0.025 U | 0.096 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | **0.00083 J** | **0.00025 J** | **0.00027 J** | **0.00025 J** | **0.0018 J** | 0.00012 U | 0.00048 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **13700 J** | **11700 J** | **14600 J** | **14500 J** | **12600 J** | **6520** | **14900 J** |
| Antimony | | 7440-36-0 | **4.8 J** | **4.4 J** | **8.7 J** | **11.7 J** | **18.1 J** | **0.72 J** | **7.6 J** |
| Arsenic | | 7440-38-2 | **57.7 J** | **39.2 J** | **123 J** | **137 J** | **135 J** | **8.7 J** | **96 J** |
| Barium | | 7440-39-3 | **216 J** | **183 J** | **229 J** | **330 J** | **273 J** | **42 J** | **200 J** |
| Beryllium | | 7440-41-7 | **0.87 J** | **0.8 J** | **1 J** | **1.1 J** | **0.89 J** | **0.39 J** | **0.83 J** |
| Cadmium | | 7440-43-9 | **36.7 J** | **33.4 J** | **81.2 J** | **109 J** | **131 J** | **1.3 J** | **57.5 J** |
| Calcium | | 7440-70-2 | **19100 J** | **16400 J** | **20000 J** | **21300 J** | **14600 J** | **8900 J** | **16600 J** |
| Chromium | | 7440-47-3 | **333 J** | **288 J** | **621 J** | **1110 J** | **910 J** | **25.1** | **484 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **15 J** | **13.4 J** | **28.2 J** | **35.1 J** | **35.1 J** | **7.2** | **22.1 J** |
| Copper | | 7440-50-8 | **3030 J** | **2920 J** | **6490 J** | **8270 J** | **6960 J** | **104** | **4950 J** |
| Iron | | 7439-89-6 | **30500 J** | **27400 J** | **37100 J** | **35200 J** | **27900 J** | **15400** | **36200 J** |
| Lead | | 7439-92-1 | **705 J** | **715 J** | **1090 J** | **1240 J** | **1040 J** | **30.1** | **875 J** |
| Magnesium | | 7439-95-4 | **13500 J** | **10300 J** | **11400 J** | **8220 J** | **4230 J** | **7120** | **13400 J** |
| Manganese | | 7439-96-5 | **256 J** | **209 J** | **303 J** | **294 J** | **240 J** | **314** | **300 J** |
| Mercury | | 7439-97-6 | **2.71 J** | **2.64 J** | **2.78 J** | **6.7 J** | **4.77 J** | **0.0384 J** | **3.88 J** |
| Nickel | | 7440-02-0 | **376 J** | **329 J** | **1080 J** | **1490 J** | **1850 J** | **31.7 J** | **689 J** |
| Potassium | | 7440-09-7 | **3430 J** | **2610 J** | **2800 J** | **2430 J** | **1440 J** | **1730 J** | **3730 J** |
| Selenium | | 7782-49-2 | **3.8 J** | **3.7 J** | **10.7 J** | **12.2 J** | **8.7 J** | **0.55 J** | **9 J** |
| Silver | | 7440-22-4 | **15.9 J** | **15.2 J** | **28.4 J** | **38.2 J** | **29.8 J** | **0.4 J** | **22.9 J** |
| Sodium | | 7440-23-5 | **18700 J** | **12500 J** | **11700 J** | **5560 J** | **1590 J** | **472** | **29500 J** |
| Thallium | | 7440-28-0 | **0.53 J** | **0.45 J** | **0.59 J** | **0.57 J** | **0.34 J** | **0.13** | **0.56 J** |
| Tin | | 7440-31-5 | **58.6 J** | **57.6 J** | **89.9 J** | **93.7 J** | **76.6 J** | **3 J** | **71.5 J** |
| Vanadium | | 7440-62-2 | **63.6 J** | **56.4 J** | **107 J** | **81.1 J** | **82.7 J** | **23** | **73.4 J** |
| Zinc | | 7440-66-6 | **1940 J** | **1830 J** | **4590 J** | **9850 J** | **7670 J** | **123 J** | **3680 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 1.7 UJ | 1.4 UJ | **0.96 J** | **6.3 J** | **6.6 J** | 0.62 U | **1.8 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 87.2 UJ | **247 J** | **505 J** | **301 J** | **231 J** | 31.2 U | 119 UJ |
| Black Carbon | | BC | **7520 J** | **6450 J** | **6090 J** | **9360 J** | **18200 J** | **5210 J** | **7490 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 3.5 UJ | 2.8 UJ | **0.83 J** | **0.89 J** | **0.71 J** | **0.27 J** | **1 J** |
| pH (s.u.) | | pH | **7.6 J** | **7.9 J** | **8.3 J** | **7.9 J** | **7.9 J** | **8.6 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **5200 J** | **2870 J** | **5850 J** | **2830 J** | **1850 J** | **90.0 J** | **5710 J** |
| Total Kjeldahl Nitrogen | | TKN | **5690 J** | **3350 J** | **5590 J** | **5970 J** | **5650 J** | 187 UJ | **6720 J** |
| Total Nitrogen | | 7727-37-9 | **5690 J** | **3350 J** | **5590 J** | **5970 J** | **5650 J** | 50.0 UJ | **6720 J** |
| Total Organic Carbon | | TOC | **94300 J** | **102000 J** | **108000 J** | **142000 J** | **120000 J** | **9150 J** | **93400 J** |
| Total Phosphorous | | 7723-14-0 | **281 J** | **74.7 J** | **707 J** | **4470 J** | **3660 J** | **99.5 J** | **277 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED23 | GPEC-SED23 | GPEC-SED24 | GPEC-SED24 | GPEC-SED24 | GPEC-SED25 | GPEC-SED25 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED23(1-3) | GPECSED23(3.2-4.2) | GPECSED24(0-0.33) | GPECSED24(5-7) | GPECSED24(8.5-10.5) | GPECSED25(0-0.33) | GPECSED25(0.33-2.33) |
| | | Start Depth | 1 | 3.2 | 0 | 5 | 8.5 | 0 | 0.33 |
| | | End Depth | 3 | 4.2 | 0.33 | 7 | 10.5 | 0.33 | 2.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.31 J** | NA | NA | **0.22 J** | NA | 0.023 UJ | NA |
| Toluene | | 108-88-3 | **0.16 J** | NA | NA | **0.14 J** | NA | 0.023 UJ | NA |
| Ethylbenzene | | 100-41-4 | **2.5 J** | NA | NA | **2.2 J** | NA | 0.023 UJ | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **4 J** | NA | NA | **3.3 J** | NA | 0.07 UJ | NA |
| Total BTEX | | TBTEX | **6.97** | NA | NA | **5.86** | NA | ND | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 2.3 UJ | NA | NA | 2.6 UJ | NA | 0.093 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Bromodichloromethane | | 75-27-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Bromoform | | 75-25-2 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Bromomethane | | 74-83-9 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 2-Butanone | | 78-93-3 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Carbon disulfide | | 75-15-0 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Chlorobenzene | | 108-90-7 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Chloroethane | | 75-00-3 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Chloroform | | 67-66-3 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Chloromethane | | 74-87-3 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Cyclohexane | | 110-82-7 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Dibromochloromethane | | 124-48-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Isopropyl benzene | | 98-82-8 | **0.53 J** | NA | NA | **0.46 J** | NA | 0.023 UJ | NA |
| Methyl acetate | | 79-20-9 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Methylcyclohexane | | 108-87-2 | **0.51 J** | NA | NA | **0.34 J** | NA | 0.023 UJ | NA |
| Methylene chloride | | 75-09-2 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Styrene | | 100-42-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Tetrachloroethene | | 127-18-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 0.57 UJ | NA | NA | 0.66 UJ | NA | **0.019 J** | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.57 UJ | NA | NA | 0.66 UJ | NA | **0.013 J** | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Trichloroethene | | 79-01-6 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |

| | | Location Name | GPEC-SED23 | GPEC-SED23 | GPEC-SED24 | GPEC-SED24 | GPEC-SED24 | GPEC-SED25 | GPEC-SED25 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED23(1-3) | GPECSED23(3.2-4.2) | GPECSED24(0-0.33) | GPECSED24(5-7) | GPECSED24(8.5-10.5) | GPECSED25(0-0.33) | GPECSED25(0.33-2.33) |
| | | Start Depth | 1 | 3.2 | 0 | 5 | 8.5 | 0 | 0.33 |
| | | End Depth | 3 | 4.2 | 0.33 | 7 | 10.5 | 0.33 | 2.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Vinyl chloride | | 75-01-4 | 0.57 UJ | NA | NA | 0.66 UJ | NA | 0.023 UJ | NA |
| Total VOCs | | TVOC | **8.01** | NA | NA | **6.66** | NA | **0.032** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **13 J** | **7.7** | **2.1 J** | **160 J** | **1.3 J** | 7.5 UJ | **11 J** |
| Acenaphthylene | | 208-96-8 | **6 J** | **1.2 J** | **2.5 J** | **21 J** | **0.5 J** | **2.3 J** | **6.1 J** |
| Anthracene | | 120-12-7 | **22 J** | **5.5** | **3.9 J** | **100 J** | **1.9** | 7.5 UJ | **14 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | **8.1 J** | **1.5 J** | **6.1 J** | **24 J** | **0.6 J** | **5.6 J** | **6.3 J** |
| Fluoranthene | | 206-44-0 | **45 J** | **7.2** | **14 J** | **120 J** | **3** | **14 J** | **30 J** |
| Fluorene | | 86-73-7 | **15 J** | **5.2** | 8 UJ | **96 J** | **1.5 J** | 7.5 UJ | **11 J** |
| 2-Methylnaphthalene | | 91-57-6 | **36 J** | **20** | **2.7 J** | **330 J** | **6.1** | 7.5 UJ | **40 J** |
| Naphthalene | | 91-20-3 | **63 J** | **38** | 8 UJ | **540 J** | **4.4** | 7.5 UJ | **42 J** |
| Phenanthrene | | 85-01-8 | **76 J** | **19** | 8 UJ | **350 J** | **9.8** | 7.5 UJ | **68 J** |
| Pyrene | | 129-00-0 | **59 J** | **14** | **23 J** | **210 J** | **6** | **17 J** | **43 J** |
| Benz[a]anthracene | | 56-55-3 | **28 J** | **6** | **11 J** | **77 J** | **2** | **7.4 J** | **16 J** |
| Benzo[a]pyrene | | 50-32-8 | **15 J** | **3.9** | **8.9 J** | **54 J** | **1.4 J** | **7.9 J** | **11 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **16 J** | **3.6** | **6.5 J** | **48 J** | **1.2 J** | **6.8 J** | **12 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | **3.8 J** | 5.1 UJ |
| Chrysene | | 218-01-9 | **26 J** | **5.4** | **11 J** | **81 J** | **2** | **6.5 J** | **16 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | **2.5 J** | **0.3 J** | **1.7 J** | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **5.1 J** | **0.94 J** | **3.8 J** | **18 J** | **0.44 J** | **3.5 J** | **4.7 J** |
| Total PAHs | | TPAH | **435.7** | **139.44** | **97.2** | **2229** | **42.14** | **74.8** | **331.1** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | **4.4 J** | **2 J** | 40 UJ | **32 J** | 9.3 U | 37 UJ | **5.6 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Bis(2-chloroethyl)ether | | 111-44-4 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **2.9 J** | 21 U | **140 J** | **8.7 J** | **8 J** | **91 J** | **120 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Butyl benzyl phthalate | | 85-68-7 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Caprolactam | | 105-60-2 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| Carbazole | | 86-74-8 | **1.2 J** | **0.22 J** | 8 UJ | **3.9 J** | 1.9 U | 7.5 UJ | 5.1 UJ |
| 4-Chloro-3-methylphenol | | 59-50-7 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 4-Chloroaniline | | 106-47-8 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | **2.6 J** |
| 2-Chloronaphthalene | | 91-58-7 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| 2-Chlorophenol | | 95-57-8 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Dibenzofuran | | 132-64-9 | **5.6 J** | **1.2 J** | 40 UJ | **21 J** | 9.3 U | 37 UJ | 25 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Diethyl phthalate | | 84-66-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Dimethyl phthalate | | 131-11-3 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2,4-Dimethylphenol | | 105-67-9 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Di-n-butyl phthalate | | 84-74-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2,6-Dinitrotoluene | | 606-20-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 1,4-Dioxane | | 123-91-1 | 36 UJ | 21 U | 80 UJ | 84 UJ | 19 U | 75 UJ | 51 UJ |
| Di-n-octyl phthalate | | 117-84-0 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Hexachlorobutadiene | | 87-68-3 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED23 | GPEC-SED23 | GPEC-SED24 | GPEC-SED24 | GPEC-SED24 | GPEC-SED25 | GPEC-SED25 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED23(1-3) | GPECSED23(3.2-4.2) | GPECSED24(0-0.33) | GPECSED24(5-7) | GPECSED24(8.5-10.5) | GPECSED25(0-0.33) | GPECSED25(0.33-2.33) |
| | | Start Depth | 1 | 3.2 | 0 | 5 | 8.5 | 0 | 0.33 |
| | | End Depth | 3 | 4.2 | 0.33 | 7 | 10.5 | 0.33 | 2.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 18 UJ | 10 UJ | 40 UJ | 42 UJ | 9.3 UJ | 37 UJ | 25 UJ |
| Hexachloroethane | | 67-72-1 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Isophorone | | 78-59-1 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2-Methylphenol | | 95-48-7 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2-Nitroaniline | | 88-74-4 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| 3-Nitroaniline | | 99-09-2 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| 4-Nitroaniline | | 100-01-6 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| Nitrobenzene | | 98-95-3 | 36 UJ | 21 U | 80 UJ | 84 UJ | 19 U | 75 UJ | 51 UJ |
| 2-Nitrophenol | | 88-75-5 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 4-Nitrophenol | | 100-02-7 | 91 UJ | 52 U | 200 UJ | 210 UJ | 48 U | 190 UJ | 130 UJ |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| N-Nitrosodiphenylamine | | 86-30-6 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Pentachlorophenol | | 87-86-5 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Phenol | | 108-95-2 | 3.6 UJ | 2.1 U | 8 UJ | 8.5 UJ | 1.9 U | 7.5 UJ | 5.1 UJ |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| 2,4,6-Trichlorophenol | | 88-06-2 | 18 UJ | 10 U | 40 UJ | 42 UJ | 9.3 U | 37 UJ | 25 UJ |
| Total SVOCs | | TSVOC | **449.8** | **142.86** | **237.2** | **2294.6** | **50.14** | **165.8** | **459.3** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1248 | | 12672-29-6 | 0.44 UJ | 0.25 U | **2.2 J** | **0.74 J** | 0.25 UJ | **1.6 J** | **16 J** |
| Aroclor 1254 | | 11097-69-1 | **0.13 J** | 0.25 U | **3.2 J** | **1.8 J** | 0.25 UJ | **2.3 J** | **18 J** |
| Aroclor 1260 | | 11096-82-5 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1262 | | 37324-23-5 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Aroclor 1268 | | 11100-14-4 | 0.44 UJ | 0.25 U | 0.98 UJ | 0.49 UJ | 0.25 UJ | 0.93 UJ | 0.62 UJ |
| Total PCBs | | 1336-36-3 | **0.13** | ND | **5.4** | **2.54** | ND | **3.9** | **34** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | **11000 J** | NA | **5.3** | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | **3200 J** | NA | **9.6 J** | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | **8700 J** | NA | **5.3 J** | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | **210 J** | NA | 49 U | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | **6200 J** | NA | **11** | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | **7100 J** | NA | **3.8** | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | **760 J** | NA | 49 U | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | **12 J** | NA | 49 U | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | **1700 J** | NA | 49 U | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | **1600 J** | NA | **2.0 J** | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | **72 J** | NA | 49 U | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | **170 J** | NA | 49 U | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | **150 J** | NA | 49 U | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | **240 J** | NA | 49 U | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | **6100 J** | NA | **4.7 J** | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | **26000 J** | NA | **14 J** | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | **4600 J** | NA | **4.2** | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | **220 J** | NA | 49 U | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | **710 J** | NA | 49 U | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | **59 J** | NA | 49 U | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | **440 J** | NA | **1.6 J** | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | **3200 J** | NA | **7.8** | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | **470 J** | NA | 9.8 U | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | **150 J** | NA | **1.8 J** | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | **31 J** | NA | 9.8 U | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| alpha-bhc | | 319-84-6 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| beta-BHC | | 319-85-7 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |

| | | Location Name | GPEC-SED23 | GPEC-SED23 | GPEC-SED24 | GPEC-SED24 | GPEC-SED24 | GPEC-SED25 | GPEC-SED25 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED23(1-3) | GPECSED23(3.2-4.2) | GPECSED24(0-0.33) | GPECSED24(5-7) | GPECSED24(8.5-10.5) | GPECSED25(0-0.33) | GPECSED25(0.33-2.33) |
| | | Start Depth | 1 | 3.2 | 0 | 5 | 8.5 | 0 | 0.33 |
| | | End Depth | 3 | 4.2 | 0.33 | 7 | 10.5 | 0.33 | 2.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| delta-BHC | | 319-86-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.14 J** |
| alpha-chlordane | | 5103-71-9 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.044 UJ | 0.025 UJ | **0.17 J** | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.27 JN** |
| oxy-Chlordane | | 27304-13-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| o,p'-DDE | | 3424-82-6 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| 4,4'-DDE | | 72-55-9 | 0.044 UJ | 0.025 UJ | **0.095 J** | **0.062 JN** | 0.025 UJ | **0.082 J** | **0.65 JN** |
| o,p'-DDT | | 789-02-6 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.49 J** |
| 4,4'-DDT | | 50-29-3 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | **0.13 J** | **0.66 J** |
| Dieldrin | | 60-57-1 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.34 J** |
| Endosulfan I | | 959-98-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Endosulfan II | | 33213-65-9 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.066 JN** |
| Endrin | | 72-20-8 | 0.044 UJ | 0.025 UJ | **0.079 J** | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Endrin ketone | | 53494-70-5 | 0.044 UJ | 0.025 UJ | 0.098 UJ | **0.087 J** | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Heptachlor | | 76-44-8 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.044 UJ | 0.025 UJ | **0.071 J** | 0.049 UJ | 0.025 UJ | **0.048 J** | **0.094 JN** |
| Hexachlorobenzene | | 118-74-1 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Methoxychlor | | 72-43-5 | 0.089 UJ | 0.05 UJ | 0.2 UJ | 0.097 UJ | 0.05 UJ | 0.19 UJ | 0.12 UJ |
| Mirex | | 2385-85-5 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| Mitotane | | 53-19-0 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | 0.062 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.044 UJ | 0.025 UJ | 0.098 UJ | 0.049 UJ | 0.025 UJ | 0.093 UJ | **0.072 JN** |
| trans-Nonachlor | | 39765-80-5 | 1.8 UJ | 1 UJ | 3.9 UJ | 1.9 UJ | 0.99 UJ | 3.7 UJ | **0.58 J** |
| Toxaphene | | 8001-35-2 | 1.8 UJ | 1 UJ | 3.9 UJ | 1.9 UJ | 0.99 UJ | 3.7 UJ | 2.5 UJ |
| Total Pesticides | | TPEST | ND | ND | **0.415** | **0.149** | ND | **0.26** | **3.362** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | **0.0015 J** | 0.00031 U | NA | NA | 0.00027 U | NA | NA |
| alpha-bhc | | 319-84-6 | **0.0012 J** | **0.000085 J** | NA | NA | 0.00027 U | NA | NA |
| beta-BHC | | 319-85-7 | **0.01 J** | **0.000034 J** | NA | NA | 0.00027 U | NA | NA |
| alpha-chlordane | | 5103-71-9 | **0.011 J** | **0.000072 J** | NA | NA | **0.00018 J** | NA | NA |
| gamma-Chlordane | | 5103-74-2 | **0.0082 J** | **0.000072 J** | NA | NA | **0.00025 J** | NA | NA |
| oxy-Chlordane | | 27304-13-8 | 0.0039 UJ | 0.00031 U | NA | NA | 0.00027 U | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.014 J** | **0.000049 J** | NA | NA | **0.00017 J** | NA | NA |
| o,p'-DDE | | 3424-82-6 | **0.00059 J** | **0.000029 J** | NA | NA | **0.000027 J** | NA | NA |
| 4,4'-DDE | | 72-55-9 | **0.018 J** | **0.00031 J** | NA | NA | **0.00034 J** | NA | NA |
| o,p'-DDT | | 789-02-6 | 0.0039 UJ | **0.000045 J** | NA | NA | 0.00027 U | NA | NA |
| 4,4'-DDT | | 50-29-3 | **0.0089 J** | **0.00011 J** | NA | NA | 0.00027 U | NA | NA |
| delta-BHC | | 319-86-8 | **0.0026 J** | 0.00031 U | NA | NA | 0.00027 U | NA | NA |
| Dieldrin | | 60-57-1 | **0.016 J** | **0.000078 J** | NA | NA | **0.00016 J** | NA | NA |
| Endosulfan I | | 959-98-8 | **0.0098 J** | **0.0011** | NA | NA | **0.00027 J** | NA | NA |
| Endosulfan II | | 33213-65-9 | **0.052 J** | **0.00052** | NA | NA | **0.00023 J** | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | **0.038 J** | **0.000033 J** | NA | NA | 0.00027 U | NA | NA |
| Endrin | | 72-20-8 | **0.014 J** | **0.00016 J** | NA | NA | 0.00027 U | NA | NA |
| Endrin aldehyde | | 7421-93-4 | **0.1 J** | 0.00031 U | NA | NA | 0.00027 UJ | NA | NA |
| Endrin ketone | | 53494-70-5 | **0.093 J** | 0.00031 U | NA | NA | 0.00027 U | NA | NA |
| gamma-BHC | | 58-89-9 | **0.0033 J** | **0.00003 J** | NA | NA | **0.000021 J** | NA | NA |
| Heptachlor | | 76-44-8 | **0.0032 J** | **0.000013 J** | NA | NA | **0.0000058 J** | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | **0.013 J** | 0.00031 U | NA | NA | **0.0000032 J** | NA | NA |
| Hexachlorobenzene | | 118-74-1 | **0.0056 J** | **0.0012** | NA | NA | 0.00027 U | NA | NA |
| Methoxychlor | | 72-43-5 | **0.11 J** | 0.00031 U | NA | NA | 0.00027 UJ | NA | NA |
| Mirex | | 2385-85-5 | 0.0039 UJ | 0.00031 U | NA | NA | 0.00027 U | NA | NA |
| Mitotane | | 53-19-0 | **0.0014 J** | **0.000041 J** | NA | NA | **0.000091 J** | NA | NA |
| cis-Nonachlor | | 5103-73-1 | 0.0039 UJ | 0.00031 U | NA | NA | **0.000035 J** | NA | NA |
| trans-Nonachlor | | 39765-80-5 | 0.0039 UJ | **0.000041 J** | NA | NA | **0.000073 J** | NA | NA |
| Toxaphene | | 8001-35-2 | 0.19 UJ | 0.077 U | NA | NA | 0.068 U | NA | NA |
| Total OC Pesticides | | NE | **0.53529** | **0.004022** | NA | NA | **0.001856** | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 18 UJ | 10 U | 40 UJ | 21 UJ | 9.9 U | 37 UJ | 25 UJ |
| 2,4-D | | 94-75-7 | 0.18 UJ | 0.1 U | 0.4 UJ | 0.21 UJ | 0.099 U | 0.37 UJ | 0.25 UJ |
| 2,4-DB | | 94-82-6 | 0.18 UJ | 0.1 U | 0.4 UJ | 0.21 UJ | 0.099 U | 0.37 UJ | 0.25 UJ |
| Dicamba | | 1918-00-9 | 0.091 UJ | 0.052 U | 0.2 UJ | 0.11 UJ | 0.05 U | 0.19 UJ | 0.13 UJ |
| Dichloroprop | | 120-36-5 | 0.18 UJ | 0.1 U | 0.4 UJ | 0.21 UJ | 0.099 U | 0.37 UJ | 0.25 UJ |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.2 UJ | 0.12 U | 0.45 UJ | 0.24 UJ | 0.11 U | 0.42 UJ | 0.28 UJ |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED23 | GPEC-SED23 | GPEC-SED24 | GPEC-SED24 | GPEC-SED24 | GPEC-SED25 | GPEC-SED25 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED23(1-3) | GPECSED23(3.2-4.2) | GPECSED24(0-0.33) | GPECSED24(5-7) | GPECSED24(8.5-10.5) | GPECSED25(0-0.33) | GPECSED25(0.33-2.33) |
| | | Start Depth | 1 | 3.2 | 0 | 5 | 8.5 | 0 | 0.33 |
| | | End Depth | 3 | 4.2 | 0.33 | 7 | 10.5 | 0.33 | 2.33 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.027 UJ | 0.016 U | 0.06 UJ | 0.032 UJ | 0.015 U | 0.056 UJ | 0.038 UJ |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 18 UJ | 10 U | 40 UJ | **16 J** | 9.9 U | 37 UJ | 25 UJ |
| Silvex | | 93-72-1 | 0.045 UJ | 0.026 U | 0.1 UJ | 0.053 UJ | 0.025 U | 0.093 UJ | 0.063 UJ |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.045 UJ | 0.026 U | 0.1 UJ | 0.053 UJ | 0.025 U | 0.093 UJ | 0.063 UJ |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00023 UJ | 0.00013 UJ | **0.00028 J** | 0.00026 UJ | 0.00012 UJ | **0.00024 J** | R |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **13900 J** | **19500 J** | **21600 J** | **17600 J** | **2880** | **16500 J** | **15900 J** |
| Antimony | | 7440-36-0 | **15.1 J** | 0.13 UJ | **7.5 J** | **39.2 J** | 0.12 UJ | **5.1 J** | **31.4 J** |
| Arsenic | | 7440-38-2 | **157 J** | **2 J** | **85.1 J** | **387 J** | **1.3 J** | **53.2 J** | **217 J** |
| Barium | | 7440-39-3 | **264 J** | **151 J** | **253 J** | **627 J** | **14.4 J** | **209 J** | **406 J** |
| Beryllium | | 7440-41-7 | **0.73 J** | **0.93 J** | **1.2 J** | **1.1 J** | **0.16** | **0.85 J** | **1.2 J** |
| Cadmium | | 7440-43-9 | **5.4 J** | **0.22 J** | **68.2 J** | **21.5 J** | **0.096 J** | **47.8 J** | **378 J** |
| Calcium | | 7440-70-2 | **6040 J** | **13400 J** | **18900 J** | **12600 J** | **13100 J** | **15300 J** | **17800 J** |
| Chromium | | 7440-47-3 | **81.2 J** | **42.3** | **545 J** | **244 J** | **7.4** | **409 J** | **2060 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **18 J** | **13.6** | **28.1 J** | **24.9 J** | **3.3** | **20 J** | **66.2 J** |
| Copper | | 7440-50-8 | **2150 J** | **28.7 J** | **4900 J** | **5450 J** | **20.3 J** | **2880 J** | **9940 J** |
| Iron | | 7439-89-6 | **30700 J** | **33200** | **44400 J** | **44800 J** | **11100** | **37100 J** | **45300 J** |
| Lead | | 7439-92-1 | **511 J** | **12.5 J** | **1020 J** | **1730 J** | **4.2 J** | **752 J** | **1730 J** |
| Magnesium | | 7439-95-4 | **6830 J** | **14700 J** | **15200 J** | **7460 J** | **6270** | **13100 J** | **8300 J** |
| Manganese | | 7439-96-5 | **355 J** | **618 J** | **374 J** | **325 J** | **163 J** | **281 J** | **286 J** |
| Mercury | | 7439-97-6 | **1.21 J** | **0.022** | **2.8 J** | **6.84 J** | **0.0031** | **3.42 J** | **5.06 J** |
| Nickel | | 7440-02-0 | **410 J** | **34.2** | **770 J** | **1310 J** | **9.6** | **484 J** | **3500 J** |
| Potassium | | 7440-09-7 | **2720 J** | **6280 J** | **5320 J** | **2860 J** | **440** | **4430 J** | **3120 J** |
| Selenium | | 7782-49-2 | **29 J** | **0.51 J** | **9.2 J** | **39.3 J** | **0.2 J** | **5.8 J** | **11.2 J** |
| Silver | | 7440-22-4 | **7.4 J** | **0.056 J** | **24.6 J** | **23.6 J** | **0.043 J** | **18.2 J** | **54.3 J** |
| Sodium | | 7440-23-5 | **6740 J** | **1590 J** | **25300 J** | **623 J** | **132 J** | **28200 J** | **15900 J** |
| Thallium | | 7440-28-0 | **0.78 J** | **0.38 J** | **0.86 J** | **2 J** | **0.06 J** | **0.64 J** | **0.69 J** |
| Tin | | 7440-31-5 | **49.5 J** | **1.1** | **88.3 J** | **186 J** | 0.31 U | **66.1 J** | **165 J** |
| Vanadium | | 7440-62-2 | **41.8 J** | **48.9 J** | **102 J** | **52.5 J** | **9.7 J** | **75.5 J** | **116 J** |
| Zinc | | 7440-66-6 | **1260 J** | **78.2 J** | **4400 J** | **4510 J** | **23.1 J** | **3400 J** | **22000 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | **4 J** | 0.66 UJ | **1.7 J** | **14 J** | 0.62 UJ | **0.92 J** | **10.1 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | **274 J** | 32.8 U | 125 UJ | **221 J** | 31.0 U | 116 UJ | **890 J** |
| Black Carbon | | BC | **4670 J** | **4980 J** | **7560 J** | **56400 J** | **12300 J** | **7540 J** | **8260 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.73 J** | **1.1 J** | 5.0 UJ | **1.5 J** | **0.58 J** | **1.1 J** | **2.8 J** |
| pH (s.u.) | | pH | **7.9 J** | **7.7 J** | **7.6 J** | **7.9 J** | **8.3 J** | **7.3 J** | **7.8 J** |
| Sulfide | | 18496-25-8 | **227 J** | **62.9 J** | **5630 J** | **4910 J** | **119 J** | **4750 J** | **13400 J** |
| Total Kjeldahl Nitrogen | | TKN | **2100 J** | **737 J** | **7300 J** | **8430 J** | **907 J** | **6940 J** | **10700 J** |
| Total Nitrogen | | 7727-37-9 | **2100 J** | **738 J** | **7300 J** | **8430 J** | **908 J** | **6940 J** | **10700 J** |
| Total Organic Carbon | | TOC | **37600 J** | **8240 J** | **97200 J** | **211000 J** | **16100 J** | **95300 J** | **158000 J** |
| Total Phosphorous | | 7723-14-0 | **552 J** | **107 J** | **1940 J** | **2440 J** | **91.7 J** | **418 J** | **5730 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED25 | GPEC-SED26 | GPEC-SED26 | GPEC-SED26 | GPEC-SED27 | GPEC-SED27 | GPEC-SED27 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED25(8.33-10.33) | GPECSED26(0-0.33) | GPECSED26(3-5) | GPECSED26(10-12.33) | GPECSED27(0-0.33) | GPECSED27(2-4) | GPECSED27(6.5-7.5) |
| | | Start Depth | 8.33 | 0 | 3 | 10 | 0 | 2 | 6.5 |
| | | End Depth | 10.33 | 0.33 | 5 | 12.33 | 0.33 | 4 | 7.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | 0.023 UJ | **0.19 J** | NA | 0.022 UJ | NA | 0.35 U |
| Toluene | | 108-88-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Ethylbenzene | | 100-41-4 | NA | 0.023 UJ | **0.37 J** | NA | 0.022 UJ | NA | **4.6** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | 0.069 UJ | **1.5 J** | NA | 0.066 UJ | NA | **3.4** |
| Total BTEX | | TBTEX | NA | ND | **2.06** | NA | ND | NA | **8** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | 0.092 UJ | 2.9 U | NA | 0.087 UJ | NA | 1.4 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Bromodichloromethane | | 75-27-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Bromoform | | 75-25-2 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Bromomethane | | 74-83-9 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 2-Butanone | | 78-93-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Carbon disulfide | | 75-15-0 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Carbon tetrachloride | | 56-23-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Chlorobenzene | | 108-90-7 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Chloroethane | | 75-00-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Chloroform | | 67-66-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Chloromethane | | 74-87-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Cyclohexane | | 110-82-7 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Dibromochloromethane | | 124-48-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Dichlorodifluoromethane | | 75-71-8 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 1,1-Dichloroethane | | 75-34-3 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 1,2-Dichloroethane | | 107-06-2 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,1-Dichloroethene | | 75-35-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,2-Dichloropropane | | 78-87-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Isopropyl benzene | | 98-82-8 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | **0.76** |
| Methyl acetate | | 79-20-9 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Methyl tert-butyl ether | | 1634-04-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Methylcyclohexane | | 108-87-2 | NA | 0.023 UJ | **0.38 J** | NA | 0.022 UJ | NA | 0.35 U |
| Methylene chloride | | 75-09-2 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Styrene | | 100-42-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| Tetrachloroethene | | 127-18-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 UJ |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Trichloroethene | | 79-01-6 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Trichlorofluoromethane | | 75-69-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED25 | GPEC-SED26 | GPEC-SED26 | GPEC-SED26 | GPEC-SED27 | GPEC-SED27 | GPEC-SED27 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED25(8.33-10.33) | GPECSED26(0-0.33) | GPECSED26(3-5) | GPECSED26(10-12.33) | GPECSED27(0-0.33) | GPECSED27(2-4) | GPECSED27(6.5-7.5) |
| | | Start Depth | 8.33 | 0 | 3 | 10 | 0 | 2 | 6.5 |
| | | End Depth | 10.33 | 0.33 | 5 | 12.33 | 0.33 | 4 | 7.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Vinyl chloride | | 75-01-4 | NA | 0.023 UJ | 0.73 U | NA | 0.022 UJ | NA | 0.35 U |
| Total VOCs | | TVOC | NA | ND | **2.44** | NA | ND | NA | **8.76** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **0.97 J** | **2 J** | **62 J** | **1.3 J** | 7 UJ | **25 J** | **200** |
| Acenaphthylene | | 208-96-8 | 2.3 U | **2.7 J** | **39 J** | **0.5 J** | **4.7 J** | **10 J** | **24** |
| Anthracene | | 120-12-7 | **1.4 J** | **3.2 J** | **86 J** | **1.7 J** | **5.2 J** | **26 J** | **99** |
| Benzo[g,h,i]perylene | | 191-24-2 | 2.3 U | **5.5 J** | **42 J** | 2.1 U | **8.4 J** | **12 J** | **32** |
| Fluoranthene | | 206-44-0 | **2.1 J** | **15 J** | **130 J** | **2.7** | **25 J** | **49 J** | **120** |
| Fluorene | | 86-73-7 | 2.3 U | 7.2 UJ | **60 J** | 2.1 U | 7 UJ | **18 J** | **100** |
| 2-Methylnaphthalene | | 91-57-6 | **2 J** | 7.2 UJ | **170 J** | **2.6** | **2.7 J** | **39 J** | **320** |
| Naphthalene | | 91-20-3 | **7.3** | 7.2 UJ | **310 J** | **5.1** | 7 UJ | **75 J** | **620** |
| Phenanthrene | | 85-01-8 | **4.2** | 7.2 UJ | **310 J** | **5** | 7 UJ | **85 J** | **320** |
| Pyrene | | 129-00-0 | **3.1** | **20 J** | **220 J** | **4.4** | **37 J** | **69 J** | **190** |
| Benz[a]anthracene | | 56-55-3 | **1.4 J** | **9.1 J** | **98 J** | **1.8 J** | **14 J** | **28 J** | **88** |
| Benzo[a]pyrene | | 50-32-8 | 2.3 U | **9 J** | **78 J** | **1.3 J** | **14 J** | **22 J** | **67** |
| Benzo[b]fluoranthene | | 205-99-2 | **0.96 J** | **11 J** | **73 J** | 2.1 U | **17 J** | **22 J** | **61** |
| Benzo[k]fluoranthene | | 207-08-9 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Chrysene | | 218-01-9 | **1.2 J** | **8.9 J** | **85 J** | **2 J** | **13 J** | **28 J** | **90** |
| Dibenz[a,h]anthracene | | 53-70-3 | 2.3 U | 7.2 UJ | **9.7 J** | 2.1 U | 7 UJ | 4.1 UJ | **8.1 J** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 2.3 U | **3.6 J** | **32 J** | 2.1 U | **7.1 J** | **7.4 J** | **23** |
| Total PAHs | | TPAH | **24.63** | **90** | **1804.7** | **28.4** | **148.1** | **515.4** | **2362.1** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 11 U | 36 UJ | **23 J** | 11 U | 35 UJ | 20 UJ | **27 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 23 U | **120 J** | **68 J** | 21 U | **300 J** | **280 J** | 87 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Butyl benzyl phthalate | | 85-68-7 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Caprolactam | | 105-60-2 | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| Carbazole | | 86-74-8 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | **4 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 4-Chloroaniline | | 106-47-8 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2-Chloronaphthalene | | 91-58-7 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| 2-Chlorophenol | | 95-57-8 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Dibenzofuran | | 132-64-9 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | **19 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2,4-Dichlorophenol | | 120-83-2 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Diethyl phthalate | | 84-66-2 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Dimethyl phthalate | | 131-11-3 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2,4-Dimethylphenol | | 105-67-9 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Di-n-butyl phthalate | | 84-74-2 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| 2,4-Dinitrophenol | | 51-28-5 | 58 UJ | 180 UJ | 440 UJ | 54 UJ | 180 UJ | 100 UJ | 220 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 1,4-Dioxane | | 123-91-1 | 23 U | 72 UJ | 170 UJ | 21 U | 70 UJ | 41 UJ | 87 U |
| Di-n-octyl phthalate | | 117-84-0 | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | **6.9 J** | 43 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Hexachlorobutadiene | | 87-68-3 | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SED25 | GPEC-SED26 | GPEC-SED26 | GPEC-SED26 | GPEC-SED27 | GPEC-SED27 | GPEC-SED27 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPECSED25(8.33-10.33) | GPECSED26(0-0.33) | GPECSED26(3-5) | GPECSED26(10-12.33) | GPECSED27(0-0.33) | GPECSED27(2-4) | GPECSED27(6.5-7.5) |
| | | | Start Depth | 8.33 | 0 | 3 | 10 | 0 | 2 | 6.5 |
| | | | End Depth | 10.33 | 0.33 | 5 | 12.33 | 0.33 | 4 | 7.5 |
| | | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Hexachloroethane | | 67-72-1 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Isophorone | | 78-59-1 | | 11 U | 36 UJ | 86 UJ | 11 U | **9.5 J** | 20 UJ | 43 U |
| 2-Methylphenol | | 95-48-7 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2-Nitroaniline | | 88-74-4 | | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| 3-Nitroaniline | | 99-09-2 | | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| 4-Nitroaniline | | 100-01-6 | | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| Nitrobenzene | | 98-95-3 | | 23 U | 72 UJ | 170 UJ | 21 U | 70 UJ | 41 UJ | 87 U |
| 2-Nitrophenol | | 88-75-5 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 4-Nitrophenol | | 100-02-7 | | 58 U | 180 UJ | 440 UJ | 54 U | 180 UJ | 100 UJ | 220 U |
| N-Nitrosodimethylamine | | 62-75-9 | | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| N-Nitrosodiphenylamine | | 86-30-6 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Pentachlorophenol | | 87-86-5 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Phenol | | 108-95-2 | | 2.3 U | 7.2 UJ | 17 UJ | 2.1 U | 7 UJ | 4.1 UJ | 8.7 U |
| Pyridine | | 110-86-1 | | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | | 11 U | 36 UJ | 86 UJ | 11 U | 35 UJ | 20 UJ | 43 U |
| Total SVOCs | | TSVOC | | **24.63** | **210** | **1895.7** | **28.4** | **457.6** | **802.3** | **2412.1** |
| **PCBS** | mg/kg | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1221 | | 11104-28-2 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1232 | | 11141-16-5 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1242 | | 53469-21-9 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1248 | | 12672-29-6 | | **5 J** | **3.3 J** | 0.25 U | **5.1 J** | **18 J** | **1.4 J** | |
| Aroclor 1254 | | 11097-69-1 | | 0.27 U | **6.3 J** | **6.8 J** | 0.25 U | **6.4 J** | **21 J** | **0.33 J** |
| Aroclor 1260 | | 11096-82-5 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1262 | | 37324-23-5 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Aroclor 1268 | | 11100-14-4 | | 0.27 U | 0.9 UJ | 0.58 UJ | 0.25 U | 0.82 UJ | 0.55 UJ | 0.27 U |
| Total PCBs | | 1336-36-3 | | ND | **11.3** | **10.1** | ND | **11.5** | **39** | **1.73** |
| **Dioxins and Furans** | pg/g | | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | | NA | NA | NA | NA | NA | **22000 J** | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | | NA | NA | NA | NA | NA | **5100 J** | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | | NA | NA | NA | NA | NA | **18000 J** | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | | NA | NA | NA | NA | NA | **370 J** | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | | NA | NA | NA | NA | NA | **9900 J** | NA |
| Total HxCDF | | 55684-94-1 | | NA | NA | NA | NA | NA | **14000 J** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | | NA | NA | NA | NA | NA | **1500 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | | NA | NA | NA | NA | NA | **17 J** | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | | NA | NA | NA | NA | NA | **2300 J** | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | | NA | NA | NA | NA | NA | **2600 J** | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | | NA | NA | NA | NA | NA | **75 J** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | | NA | NA | NA | NA | NA | **250 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | | NA | NA | NA | NA | NA | **180 J** | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | | NA | NA | NA | NA | NA | **400 J** | NA |
| Octachlorodibenzofuran | | 39001-02-0 | | NA | NA | NA | NA | NA | **13000 J** | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | | NA | NA | NA | NA | NA | **46000 J** | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | | NA | NA | NA | NA | NA | **9300 J** | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | | NA | NA | NA | NA | NA | **460 J** | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | | NA | NA | NA | NA | NA | **860 J** | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | | NA | NA | NA | NA | NA | **88 J** | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | | NA | NA | NA | NA | NA | **960 J** | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | | NA | NA | NA | NA | NA | **7300 J** | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | | NA | NA | NA | NA | NA | **530 J** | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | | NA | NA | NA | NA | NA | **320 J** | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | | NA | NA | NA | NA | NA | **68 J** | NA |
| **Pesticides** | mg/kg | | | | | | | | | |
| Aldrin | | 309-00-2 | | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| alpha-bhc | | 319-84-6 | | 0.027 UJ | 0.09 UJ | **0.086 J** | 0.025 UJ | 0.082 UJ | 0.054 UJ | **0.028** |
| beta-BHC | | 319-85-7 | | 0.027 UJ | 0.09 UJ | **0.15 JN** | 0.025 UJ | 0.082 UJ | **0.13 JN** | 0.027 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED25 | GPEC-SED26 | GPEC-SED26 | GPEC-SED26 | GPEC-SED27 | GPEC-SED27 | GPEC-SED27 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED25(8.33-10.33) | GPECSED26(0-0.33) | GPECSED26(3-5) | GPECSED26(10-12.33) | GPECSED27(0-0.33) | GPECSED27(2-4) | GPECSED27(6.5-7.5) |
| | | Start Depth | 8.33 | 0 | 3 | 10 | 0 | 2 | 6.5 |
| | | End Depth | 10.33 | 0.33 | 5 | 12.33 | 0.33 | 4 | 7.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | **0.15 JN** | 0.027 U |
| delta-BHC | | 319-86-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| alpha-chlordane | | 5103-71-9 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| gamma-Chlordane | | 5103-74-2 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | **0.24 JN** | 0.027 U |
| oxy-Chlordane | | 27304-13-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | **0.083 JN** | **0.08 JN** |
| o,p'-DDE | | 3424-82-6 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | **0.014 J** |
| 4,4'-DDE | | 72-55-9 | 0.027 UJ | **0.12 JN** | 0.058 UJ | 0.025 UJ | **0.12 JN** | **0.26 JN** | 0.027 U |
| o,p'-DDT | | 789-02-6 | 0.027 UJ | **0.23 J** | **0.18 J** | 0.025 UJ | **0.23 J** | **0.45 JN** | 0.027 UJ |
| 4,4'-DDT | | 50-29-3 | 0.027 UJ | **0.25 J** | **0.28 J** | 0.025 UJ | **0.28 J** | **0.56 J** | 0.027 U |
| Dieldrin | | 60-57-1 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endosulfan I | | 959-98-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endosulfan II | | 33213-65-9 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endosulfan sulfate | | 1031-07-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endrin | | 72-20-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endrin aldehyde | | 7421-93-4 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Endrin ketone | | 53494-70-5 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| Heptachlor | | 76-44-8 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | **0.22 JN** | 0.027 U |
| Heptachlor epoxide | | 1024-57-3 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | **0.11 JN** | 0.027 U |
| Hexachlorobenzene | | 118-74-1 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 UJ |
| Methoxychlor | | 72-43-5 | 0.055 UJ | 0.18 UJ | **0.24 JN** | 0.05 UJ | 0.16 UJ | 0.11 UJ | 0.054 U |
| Mirex | | 2385-85-5 | 0.027 UJ | 0.09 UJ | **0.065 JN** | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 UJ |
| Mitotane | | 53-19-0 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| cis-Nonachlor | | 5103-73-1 | 0.027 UJ | 0.09 UJ | 0.058 UJ | 0.025 UJ | 0.082 UJ | 0.054 UJ | 0.027 U |
| trans-Nonachlor | | 39765-80-5 | 1.1 UJ | 3.6 UJ | 2.3 UJ | 1 UJ | 3.3 UJ | 2.2 UJ | 1.1 UJ |
| Toxaphene | | 8001-35-2 | 1.1 UJ | 3.6 UJ | **7.3** | 1 UJ | 3.3 UJ | 2.2 UJ | 1.1 U |
| Total Pesticides | | TPEST | ND | **0.6** | **8.301** | ND | **0.63** | **2.203** | **0.122** |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.00031 U | NA | NA | 0.00044 U | NA | NA | NA |
| alpha-bhc | | 319-84-6 | **0.00008 J** | NA | NA | **0.00014 J** | NA | NA | NA |
| beta-BHC | | 319-85-7 | **0.000036 J** | NA | NA | **0.000045 J** | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | **0.000074 J** | NA | NA | **0.00037 J** | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | **0.000088 J** | NA | NA | **0.00046** | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | 0.00031 U | NA | NA | 0.00044 U | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | **0.00006 J** | NA | NA | **0.00034 J** | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | 0.00031 U | NA | NA | **0.000086 J** | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | **0.0003 J** | NA | NA | **0.001 J** | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | **0.000051 J** | NA | NA | **0.000096 J** | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | **0.00011 J** | NA | NA | **0.00022 J** | NA | NA | NA |
| delta-BHC | | 319-86-8 | 0.00031 U | NA | NA | 0.00044 UJ | NA | NA | NA |
| Dieldrin | | 60-57-1 | **0.000082 J** | NA | NA | **0.00035 J** | NA | NA | NA |
| Endosulfan I | | 959-98-8 | **0.0012** | NA | NA | **0.0022** | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | **0.00073** | NA | NA | **0.0011** | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | **0.000038 J** | NA | NA | **0.000033 J** | NA | NA | NA |
| Endrin | | 72-20-8 | **0.00028 J** | NA | NA | **0.00056** | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | 0.00031 U | NA | NA | 0.00044 U | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | **0.00009 J** | NA | NA | **0.00017 J** | NA | NA | NA |
| gamma-BHC | | 58-89-9 | **0.000042 J** | NA | NA | **0.000059 J** | NA | NA | NA |
| Heptachlor | | 76-44-8 | **0.000012 J** | NA | NA | **0.000019 J** | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | **0.0000077 J** | NA | NA | 0.00044 U | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | **0.0019** | NA | NA | **0.0021** | NA | NA | NA |
| Methoxychlor | | 72-43-5 | 0.00031 U | NA | NA | 0.00044 U | NA | NA | NA |
| Mirex | | 2385-85-5 | 0.00031 U | NA | NA | 0.00044 U | NA | NA | NA |
| Mitotane | | 53-19-0 | **0.000031 J** | NA | NA | **0.00019 J** | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | **0.000015 J** | NA | NA | **0.00007 J** | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | **0.000063 J** | NA | NA | **0.00017 J** | NA | NA | NA |
| Toxaphene | | 8001-35-2 | 0.079 U | NA | NA | 0.11 U | NA | NA | NA |
| Total OC Pesticides | | NE | **0.0052897** | NA | NA | **0.009778** | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 12 U | 37 UJ | 23 UJ | 11 U | 35 UJ | 22 UJ | 11 U |
| 2,4-D | | 94-75-7 | 0.12 U | 0.37 UJ | 0.23 UJ | 0.11 U | 0.35 UJ | 0.22 UJ | 0.11 U |
| 2,4-DB | | 94-82-6 | 0.12 U | 0.37 UJ | 0.23 UJ | 0.11 U | 0.35 UJ | 0.22 UJ | 0.11 U |
| Dicamba | | 1918-00-9 | 0.059 U | 0.18 UJ | 0.12 UJ | 0.053 U | 0.17 UJ | 0.11 UJ | 0.054 U |
| Dichloroprop | | 120-36-5 | 0.12 U | 0.37 UJ | 0.23 UJ | 0.11 U | 0.35 UJ | 0.22 UJ | 0.11 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.13 U | 0.41 UJ | 0.26 UJ | 0.12 U | 0.39 UJ | 0.25 UJ | 0.12 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED25 | GPEC-SED26 | GPEC-SED26 | GPEC-SED26 | GPEC-SED27 | GPEC-SED27 | GPEC-SED27 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED25(8.33-10.33) | GPECSED26(0-0.33) | GPECSED26(3-5) | GPECSED26(10-12.33) | GPECSED27(0-0.33) | GPECSED27(2-4) | GPECSED27(6.5-7.5) |
| | | Start Depth | 8.33 | 0 | 3 | 10 | 0 | 2 | 6.5 |
| | | End Depth | 10.33 | 0.33 | 5 | 12.33 | 0.33 | 4 | 7.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.018 U | 0.055 UJ | 0.035 UJ | 0.016 U | 0.052 UJ | 0.033 UJ | 0.016 U |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 12 U | 37 UJ | 23 UJ | 11 U | 35 UJ | 22 U | 11 U |
| Silvex | | 93-72-1 | 0.03 U | 0.092 UJ | 0.058 UJ | 0.027 U | 0.087 UJ | 0.055 UJ | 0.027 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.03 U | 0.092 UJ | 0.058 UJ | 0.027 U | 0.087 UJ | 0.055 UJ | 0.027 U |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00015 UJ | 0.00046 UJ | R | 0.00013 UJ | **0.00087 J** | R | 0.00014 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **6320 J** | **20400 J** | **12600 J** | **5470** | **19900 J** | **17500 J** | **9430 J** |
| Antimony | | 7440-36-0 | **1.1 J** | **6.3 J** | **30.7 J** | **0.31 J** | **7.3 J** | **21 J** | **1.4 J** |
| Arsenic | | 7440-38-2 | **9.1 J** | **78.6 J** | **272 J** | **7.5 J** | **92.4 J** | **177 J** | **34.5 J** |
| Barium | | 7440-39-3 | **48.3 J** | **300 J** | **356 J** | **38.4 J** | **264 J** | **359 J** | **75.8 J** |
| Beryllium | | 7440-41-7 | **0.27 J** | **1.1 J** | **0.97 J** | **0.24** | **1.1 J** | **1.3 J** | **0.47 J** |
| Cadmium | | 7440-43-9 | **0.33 J** | **79.4 J** | **82.1 J** | **0.29 J** | **88.8 J** | **195 J** | **2 J** |
| Calcium | | 7440-70-2 | **17900 J** | **20100 J** | **17600 J** | **3670 J** | **17900 J** | **18900 J** | **12900 J** |
| Chromium | | 7440-47-3 | **21.1 J** | **649 J** | **1710 J** | **18.5** | **708 J** | **2000 J** | **46.9** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **6.5 J** | **26.6 J** | **35.9 J** | **5.8** | **28.9 J** | **51.5 J** | **10.1** |
| Copper | | 7440-50-8 | **104 J** | **4200 J** | **7350 J** | **68.3 J** | **5690 J** | **9230 J** | **266 J** |
| Iron | | 7439-89-6 | **14100 J** | **46500 J** | **42400 J** | **12600** | **43800 J** | **45200 J** | **22100** |
| Lead | | 7439-92-1 | **35.1 J** | **1130 J** | **1630 J** | **24.3 J** | **1210 J** | **1730 J** | **104 J** |
| Magnesium | | 7439-95-4 | **10400 J** | **15700 J** | **6850 J** | **3860** | **14000 J** | **8690 J** | **9720 J** |
| Manganese | | 7439-96-5 | **193 J** | **358 J** | **245 J** | **122 J** | **353 J** | **303 J** | **296 J** |
| Mercury | | 7439-97-6 | **0.0597** | **3.66 J** | **7.33 J** | **0.0088** | **1.23 J** | **6.94 J** | **0.676** |
| Nickel | | 7440-02-0 | **36.9 J** | **723 J** | **2600 J** | **22** | **846 J** | **2040 J** | **71.9** |
| Potassium | | 7440-09-7 | **1980 J** | **5020 J** | **2610 J** | **1640** | **4830 J** | **3050 J** | **2720 J** |
| Selenium | | 7782-49-2 | **2.1 J** | **8.2 J** | **13.1 J** | **1 J** | **9.6 J** | **14 J** | **5.6 J** |
| Silver | | 7440-22-4 | **0.45 J** | **24.3 J** | **31.3 J** | **0.2 J** | **27.2 J** | **45 J** | **1.1 J** |
| Sodium | | 7440-23-5 | **605 J** | **27300 J** | **15600 J** | **464 J** | **26100 J** | **6440 J** | **682 J** |
| Thallium | | 7440-28-0 | **0.18 J** | **0.86 J** | **0.92 J** | **0.16 J** | **0.82 J** | **0.75 J** | **0.33 J** |
| Tin | | 7440-31-5 | **3.5** | **94.1 J** | **184 J** | **1.8** | **96.2 J** | **132 J** | **6.9** |
| Vanadium | | 7440-62-2 | **24.4 J** | **112 J** | **72.7 J** | **19.7 J** | **111 J** | **94.4 J** | **37.7 J** |
| Zinc | | 7440-66-6 | **99.8 J** | **5260 J** | **11300 J** | **70.8 J** | **5610 J** | **15100 J** | **274 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 0.74 UJ | **1.5 J** | **12.7 J** | 0.66 UJ | **1.2 J** | **6.4 J** | **0.85 J** |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 36.9 U | 115 UJ | **1150 J** | 33.2 U | 109 UJ | **811 J** | 34.6 U |
| Black Carbon | | BC | **7720 J** | **9810 J** | **49800 J** | **4650 J** | **7340 J** | **11500 J** | **7050 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | **0.82 J** | **1.3 J** | **1.6 J** | **0.35 J** | **1.4 J** | **1.7 J** | **0.65 J** |
| pH (s.u.) | | pH | **8.5 J** | **7.8 J** | **7.7 J** | **8.6 J** | **7.7 J** | **7.7 J** | **8.3 J** |
| Sulfide | | 18496-25-8 | **124 J** | **5030 J** | **5940 J** | **58.4 J** | **3340 J** | **7160 J** | **759** |
| Total Kjeldahl Nitrogen | | TKN | **747 J** | **44300 J** | **10900 J** | 199 UJ | **6880 J** | **9880 J** | **2180 J** |
| Total Nitrogen | | 7727-37-9 | **748 J** | **44300 J** | **10900 J** | 50.0 UJ | **6880 J** | **9880 J** | **2180 J** |
| Total Organic Carbon | | TOC | **9300 J** | **99400 J** | **231000 J** | **9940 J** | **111000 J** | **164000 J** | **34400 J** |
| Total Phosphorous | | 7723-14-0 | **133 J** | **2190 J** | **1370 J** | **581 J** | **260 J** | **2430 J** | **336 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED27 | GPEC-SED28 | GPEC-SED28 | GPEC-SED28 | GPEC-SED29 | GPEC-SED29 | GPEC-SED29 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED27(9-11) | GPECSED28(0-0.33) | GPECSED28(11-13) | GPEC-XX-062510B | GPECSED29(0-0.33) | GPECSED29(5.5-7.5) | GPECSED29(12.5-14.5) |
| | | Start Depth | 9 | 0 | 11 | 11 | 0 | 5.5 | 12.5 |
| | | End Depth | 11 | 0.33 | 13 | 13 | 0.33 | 7.5 | 14.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | GPEC-SED-28(11-13) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | NA | 1 UJ | 0.77 UJ | **0.044 J** | 0.023 UJ | **0.73 J** | NA |
| Toluene | | 108-88-3 | NA | 1 UJ | 0.77 UJ | **0.066 J** | 0.023 UJ | **0.49 J** | NA |
| Ethylbenzene | | 100-41-4 | NA | **0.16 J** | **0.24 J** | **0.078 J** | 0.023 UJ | **6 J** | NA |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | NA | **0.55 J** | **1.1 J** | **0.29 J** | 0.07 UJ | **10 J** | NA |
| Total BTEX | | TBTEX | NA | **0.71** | **1.34** | **0.478** | ND | **17.22** | NA |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | NA | 4.2 UJ | **1.2 J** | 0.057 UJ | 0.093 UJ | 2.8 UJ | NA |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Bromodichloromethane | | 75-27-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Bromoform | | 75-25-2 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Bromomethane | | 74-83-9 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 2-Butanone | | 78-93-3 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Carbon disulfide | | 75-15-0 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Carbon tetrachloride | | 56-23-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Chlorobenzene | | 108-90-7 | NA | 1 UJ | 0.77 UJ | **0.017 J** | 0.023 UJ | **0.12 J** | NA |
| Chloroethane | | 75-00-3 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Chloroform | | 67-66-3 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Chloromethane | | 74-87-3 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Cyclohexane | | 110-82-7 | NA | **0.24 J** | **0.21 J** | **0.033 J** | 0.023 UJ | 0.7 UJ | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Dibromochloromethane | | 124-48-1 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2-Dibromoethane | | 106-93-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | 1 UJ | 0.77 UJ | **0.0041 J** | 0.023 UJ | 0.7 UJ | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1-Dichloroethane | | 75-34-3 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2-Dichloroethane | | 107-06-2 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| cis-1,2-Dichloroethene | | 156-59-2 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| trans-1,2-Dichloroethene | | 156-60-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1-Dichloroethene | | 75-35-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2-Dichloropropane | | 78-87-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| cis-1,3-Dichloropropene | | 10061-01-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| trans-1,3-Dichloropropene | | 10061-02-6 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Isopropyl benzene | | 98-82-8 | NA | 1 UJ | **0.087 J** | **0.024 J** | 0.023 UJ | **0.72 J** | NA |
| Methyl acetate | | 79-20-9 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Methylcyclohexane | | 108-87-2 | NA | **1 J** | **0.99 J** | **0.11 J** | 0.023 UJ | **0.19 J** | NA |
| Methylene chloride | | 75-09-2 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Styrene | | 100-42-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Tetrachloroethene | | 127-18-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| 1,1,2-Trichloroethane | | 79-00-5 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Trichloroethene | | 79-01-6 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Trichlorofluoromethane | | 75-69-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |

| | | Location Name | GPEC-SED27 | GPEC-SED28 | GPEC-SED28 | GPEC-SED28 | GPEC-SED29 | GPEC-SED29 | GPEC-SED29 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED27(9-11) | GPECSED28(0-0.33) | GPECSED28(11-13) | GPEC-XX-062510B | GPECSED29(0-0.33) | GPECSED29(5.5-7.5) | GPECSED29(12.5-14.5) |
| | | Start Depth | 9 | 0 | 11 | 11 | 0 | 5.5 | 12.5 |
| | | End Depth | 11 | 0.33 | 13 | 13 | 0.33 | 7.5 | 14.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | GPEC-SED-28(11-13) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Vinyl chloride | | 75-01-4 | NA | 1 UJ | 0.77 UJ | 0.014 UJ | 0.023 UJ | 0.7 UJ | NA |
| Total VOCs | | TVOC | NA | **1.95** | **3.827** | **0.6661** | ND | **18.25** | NA |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | 2.2 U | 6.7 UJ | **14 J** | **16 J** | 7.2 UJ | **250 J** | **0.058** |
| Acenaphthylene | | 208-96-8 | 2.2 U | **1.4 J** | **8.1 J** | **8.8 J** | **1.9 J** | **44 J** | 0.047 U |
| Anthracene | | 120-12-7 | 2.2 U | **2 J** | **25 J** | **21 J** | **2.3 J** | **160 J** | **0.031 J** |
| Benzo[g,h,i]perylene | | 191-24-2 | 2.2 U | **4.7 J** | **8.9 J** | **11 J** | **4.6 J** | **34 J** | 0.047 U |
| Fluoranthene | | 206-44-0 | 2.2 U | **13** | **66 J** | **54 J** | **12 J** | **170 J** | **0.05** |
| Fluorene | | 86-73-7 | 2.2 U | 6.7 UJ | **20 J** | **19 J** | 7.2 UJ | **160 J** | 0.047 U |
| 2-Methylnaphthalene | | 91-57-6 | 2.2 U | 6.7 UJ | **42 J** | **82 J** | 7.2 UJ | **780 J** | **0.03 J** |
| Naphthalene | | 91-20-3 | 2.2 U | 6.7 UJ | **88 J** | **150 J** | 7.2 UJ | **1100 J** | **0.089** |
| Phenanthrene | | 85-01-8 | 2.2 U | 6.7 UJ | **92 J** | **81 J** | 7.2 UJ | **570 J** | **0.15** |
| Pyrene | | 129-00-0 | 2.2 U | **14** | **64 J** | **60 J** | **15 J** | **290 J** | **0.074** |
| Benz[a]anthracene | | 56-55-3 | 2.2 U | **7.6** | **27 J** | **27 J** | **6.8 J** | **92 J** | **0.029 J** |
| Benzo[a]pyrene | | 50-32-8 | 2.2 U | **5.4 J** | **15 J** | **20 J** | **6.6 J** | **71 J** | 0.047 U |
| Benzo[b]fluoranthene | | 205-99-2 | 2.2 U | **9.3** | **20 J** | **22 J** | **8.5 J** | **64 J** | 0.047 U |
| Benzo[k]fluoranthene | | 207-08-9 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Chrysene | | 218-01-9 | 2.2 U | **7** | **24 J** | **29 J** | **6.1 J** | **86 J** | **0.025 J** |
| Dibenz[a,h]anthracene | | 53-70-3 | 2.2 U | 6.7 UJ | **2 J** | **2.6 J** | 7.2 UJ | 17 UJ | 0.047 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | 2.2 U | **3.5 J** | **5.6 J** | **7.1 J** | **3.5 J** | **22 J** | 0.047 U |
| Total PAHs | | TPAH | ND | **67.9** | **521.6** | **610.5** | **67.3** | **3893** | **0.536** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Biphenyl | | 92-52-4 | 11 U | 33 UJ | **6.1 J** | **7.5 J** | 35 UJ | **69 J** | **0.17 J** |
| Bis(chloroisopropyl)ether | | 108-60-1 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 22 U | **85** | **6.4 J** | **13 J** | **91 J** | **26 J** | **0.14 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Butyl benzyl phthalate | | 85-68-7 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Caprolactam | | 105-60-2 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| Carbazole | | 86-74-8 | 2.2 U | 6.7 UJ | **2.3 J** | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 4-Chloroaniline | | 106-47-8 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2-Chloronaphthalene | | 91-58-7 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| 2-Chlorophenol | | 95-57-8 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Dibenzofuran | | 132-64-9 | 11 U | 33 UJ | **9.7 J** | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| 3,3-Dichlorobenzidine | | 91-94-1 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2,4-Dichlorophenol | | 120-83-2 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Diethyl phthalate | | 84-66-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Dimethyl phthalate | | 131-11-3 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2,4-Dimethylphenol | | 105-67-9 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Di-n-butyl phthalate | | 84-74-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| 2,4-Dinitrophenol | | 51-28-5 | 55 UJ | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 1,4-Dioxane | | 123-91-1 | 22 U | 67 UJ | 49 UJ | 45 UJ | 71 UJ | 170 UJ | 0.47 U |
| Di-n-octyl phthalate | | 117-84-0 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Hexachlorobutadiene | | 87-68-3 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED27 | GPEC-SED28 | GPEC-SED28 | GPEC-SED28 | GPEC-SED29 | GPEC-SED29 | GPEC-SED29 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED27(9-11) | GPECSED28(0-0.33) | GPECSED28(11-13) | GPEC-XX-062510B | GPECSED29(0-0.33) | GPECSED29(5.5-7.5) | GPECSED29(12.5-14.5) |
| | | Start Depth | 9 | 0 | 11 | 11 | 0 | 5.5 | 12.5 |
| | | End Depth | 11 | 0.33 | 13 | 13 | 0.33 | 7.5 | 14.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | GPEC-SED-28(11-13) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Hexachloroethane | | 67-72-1 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Isophorone | | 78-59-1 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2-Methylphenol | | 95-48-7 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2-Nitroaniline | | 88-74-4 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| 3-Nitroaniline | | 99-09-2 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| 4-Nitroaniline | | 100-01-6 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| Nitrobenzene | | 98-95-3 | 22 U | 67 UJ | 49 UJ | 45 UJ | 71 UJ | 170 UJ | 0.47 U |
| 2-Nitrophenol | | 88-75-5 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 4-Nitrophenol | | 100-02-7 | 55 U | 170 UJ | 130 UJ | 110 UJ | 180 UJ | 440 UJ | 1.2 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Pentachlorophenol | | 87-86-5 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Phenol | | 108-95-2 | 2.2 U | 6.7 UJ | 4.9 UJ | 4.5 UJ | 7.2 UJ | 17 UJ | 0.047 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenol | | 95-95-4 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 11 U | 33 UJ | 24 UJ | 22 UJ | 35 UJ | 85 UJ | 0.23 U |
| Total SVOCs | | TSVOC | ND | **152.9** | **546.1** | **631** | **158.3** | **3988** | **0.846** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1221 | | 11104-28-2 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1232 | | 11141-16-5 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1242 | | 53469-21-9 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1248 | | 12672-29-6 | 0.26 UJ | **1.7 J** | **0.59 J** | 0.57 UJ | **2.2 J** | **3.2 J** | 0.23 U |
| Aroclor 1254 | | 11097-69-1 | 0.26 UJ | **2.7 J** | **0.72 J** | 0.57 UJ | **3.5 J** | **5.9 J** | 0.23 U |
| Aroclor 1260 | | 11096-82-5 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1262 | | 37324-23-5 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Aroclor 1268 | | 11100-14-4 | 0.26 UJ | 0.8 UJ | 0.57 UJ | 0.57 UJ | 0.93 UJ | 0.53 UJ | 0.23 U |
| Total PCBs | | 1336-36-3 | ND | **4.4** | **1.31** | ND | **5.7** | **9.1** | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **7.1** | NA | NA | NA | **8400 J** | NA | **7.1** |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **10 J** | NA | NA | NA | **2900 J** | NA | **5.0 J** |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **6.0 J** | NA | NA | NA | **6600 J** | NA | **4.0 J** |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | 32 U | NA | NA | NA | **190 J** | NA | 5.6 U |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **17** | NA | NA | NA | **5800 J** | NA | **11** |
| Total HxCDF | | 55684-94-1 | **4.1** | NA | NA | NA | **5400 J** | NA | **6.2** |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **0.94 J** | NA | NA | NA | **610 J** | NA | **0.54 J** |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | 32 U | NA | NA | NA | **9.3 J** | NA | **0.71 J** |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **3.2** | NA | NA | NA | **1600 J** | NA | **2.9** |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **1.8 J** | NA | NA | NA | **940 J** | NA | **0.56 J** |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | 32 U | NA | NA | NA | **66 J** | NA | **0.13 J** |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | 32 U | NA | NA | NA | **160 J** | NA | **0.27 J** |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **0.51 J** | NA | NA | NA | **120 J** | NA | 5.6 U |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | 32 U | NA | NA | NA | **210 J** | NA | **0.53 J** |
| Octachlorodibenzofuran | | 39001-02-0 | **4.0 J** | NA | NA | NA | **5000 J** | NA | **3.5 J** |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **170** | NA | NA | NA | **24000 J** | NA | **130** |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **1.9** | NA | NA | NA | **3500 J** | NA | **4.7** |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | 32 U | NA | NA | NA | **190 J** | NA | **0.52 J** |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | 32 U | NA | NA | NA | **640 J** | NA | **0.83** |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | 32 U | NA | NA | NA | **57 J** | NA | **0.15 J** |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **0.53 J** | NA | NA | NA | **330 J** | NA | **0.44 J** |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **3.6** | NA | NA | NA | **2400 J** | NA | **5.4** |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **0.46** | NA | NA | NA | **420 J** | NA | **0.8** |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **1.4 J** | NA | NA | NA | **120 J** | NA | **0.56 J** |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | 6.4 U | NA | NA | NA | **25 J** | NA | 1.1 U |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| alpha-bhc | | 319-84-6 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| beta-BHC | | 319-85-7 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | **0.057 J** | **0.16 J** | 0.023 UJ |

| | | Location Name | GPEC-SED27 | GPEC-SED28 | GPEC-SED28 | GPEC-SED28 | GPEC-SED29 | GPEC-SED29 | GPEC-SED29 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED27(9-11) | GPECSED28(0-0.33) | GPECSED28(11-13) | GPEC-XX-062510B | GPECSED29(0-0.33) | GPECSED29(5.5-7.5) | GPECSED29(12.5-14.5) |
| | | Start Depth | 9 | 0 | 11 | 11 | 0 | 5.5 | 12.5 |
| | | End Depth | 11 | 0.33 | 13 | 13 | 0.33 | 7.5 | 14.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | GPEC-SED-28(11-13) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| delta-BHC | | 319-86-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | **0.065 J** | 0.056 UJ | 0.023 UJ |
| alpha-chlordane | | 5103-71-9 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| gamma-Chlordane | | 5103-74-2 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| oxy-Chlordane | | 27304-13-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.075 JN** | 0.023 UJ |
| o,p'-DDE | | 3424-82-6 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.056 J** | 0.023 UJ |
| 4,4'-DDE | | 72-55-9 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.14 JN** | 0.023 UJ |
| o,p'-DDT | | 789-02-6 | 0.026 UJ | **0.1 J** | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| 4,4'-DDT | | 50-29-3 | 0.026 UJ | **0.12 J** | 0.057 UJ | **0.18 J** | **0.13 J** | 0.056 UJ | 0.023 UJ |
| Dieldrin | | 60-57-1 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Endosulfan I | | 959-98-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Endosulfan II | | 33213-65-9 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Endosulfan sulfate | | 1031-07-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | **0.063 J** | 0.093 UJ | **0.081 JN** | 0.023 UJ |
| Endrin | | 72-20-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Endrin aldehyde | | 7421-93-4 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Endrin ketone | | 53494-70-5 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.07 J** | 0.023 UJ |
| Heptachlor | | 76-44-8 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Heptachlor epoxide | | 1024-57-3 | 0.026 UJ | **0.036 J** | 0.057 UJ | 0.057 UJ | **0.063 J** | 0.056 UJ | 0.023 UJ |
| Hexachlorobenzene | | 118-74-1 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| Methoxychlor | | 72-43-5 | 0.052 UJ | 0.16 UJ | 0.11 UJ | **0.17 J** | 0.19 UJ | **0.11 JN** | 0.047 UJ |
| Mirex | | 2385-85-5 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.037 J** | 0.023 UJ |
| Mitotane | | 53-19-0 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 UJ |
| cis-Nonachlor | | 5103-73-1 | 0.026 UJ | 0.08 UJ | 0.057 UJ | 0.057 UJ | 0.093 UJ | **0.047 J** | 0.023 UJ |
| trans-Nonachlor | | 39765-80-5 | 1 UJ | 3.2 UJ | 2.3 UJ | 2.3 UJ | 3.7 UJ | 2.2 UJ | 0.93 UJ |
| Toxaphene | | 8001-35-2 | 1 UJ | 3.2 UJ | 2.3 UJ | 2.3 UJ | 3.7 UJ | 2.2 UJ | 0.93 UJ |
| Total Pesticides | | TPEST | ND | **0.256** | ND | **0.413** | **0.315** | **0.776** | ND |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| alpha-bhc | | 319-84-6 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| beta-BHC | | 319-85-7 | 0.00031 U | NA | NA | NA | NA | NA | 0.000045 U |
| alpha-chlordane | | 5103-71-9 | 0.00024 U | NA | NA | NA | NA | NA | **0.0003** |
| gamma-Chlordane | | 5103-74-2 | 0.00025 U | NA | NA | NA | NA | NA | **0.00048** |
| oxy-Chlordane | | 27304-13-8 | 0.00027 U | NA | NA | NA | NA | NA | 0.000045 U |
| 4,4-DDD | | 72-54-8 | 0.00047 U | NA | NA | NA | NA | NA | **0.00044** |
| o,p'-DDE | | 3424-82-6 | 0.00037 U | NA | NA | NA | NA | NA | **0.000084** |
| 4,4'-DDE | | 72-55-9 | 0.00053 U | NA | NA | NA | NA | NA | **0.0012** |
| o,p'-DDT | | 789-02-6 | 0.0012 U | NA | NA | NA | NA | NA | 0.000045 U |
| 4,4'-DDT | | 50-29-3 | 0.0024 U | NA | NA | NA | NA | NA | **0.00025 J** |
| delta-BHC | | 319-86-8 | 0.00038 U | NA | NA | NA | NA | NA | 0.000045 U |
| Dieldrin | | 60-57-1 | 0.00034 U | NA | NA | NA | NA | NA | **0.00043** |
| Endosulfan I | | 959-98-8 | 0.00076 U | NA | NA | NA | NA | NA | 0.000045 U |
| Endosulfan II | | 33213-65-9 | 0.0013 U | NA | NA | NA | NA | NA | 0.000055 U |
| Endosulfan sulfate | | 1031-07-8 | **0.00048** | NA | NA | NA | NA | NA | 0.000045 U |
| Endrin | | 72-20-8 | 0.00096 U | NA | NA | NA | NA | NA | 0.000045 U |
| Endrin aldehyde | | 7421-93-4 | 0.00074 UJ | NA | NA | NA | NA | NA | 0.000045 UJ |
| Endrin ketone | | 53494-70-5 | 0.0032 U | NA | NA | NA | NA | NA | 0.000045 U |
| gamma-BHC | | 58-89-9 | 0.00029 U | NA | NA | NA | NA | NA | 0.000045 U |
| Heptachlor | | 76-44-8 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| Heptachlor epoxide | | 1024-57-3 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| Hexachlorobenzene | | 118-74-1 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| Methoxychlor | | 72-43-5 | 0.0038 UJ | NA | NA | NA | NA | NA | **0.0018 J** |
| Mirex | | 2385-85-5 | 0.00024 U | NA | NA | NA | NA | NA | 0.000045 U |
| Mitotane | | 53-19-0 | 0.00041 U | NA | NA | NA | NA | NA | **0.00028** |
| cis-Nonachlor | | 5103-73-1 | 0.00032 U | NA | NA | NA | NA | NA | **0.000086** |
| trans-Nonachlor | | 39765-80-5 | 0.00033 U | NA | NA | NA | NA | NA | **0.000096** |
| Toxaphene | | 8001-35-2 | 0.095 U | NA | NA | NA | NA | NA | 0.011 U |
| Total OC Pesticides | | NE | **0.00048** | NA | NA | NA | NA | NA | **0.005446** |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 11 U | 33 UJ | 24 UJ | 23 UJ | 37 UJ | 22 UJ | 9.3 U |
| 2,4-D | | 94-75-7 | 0.11 U | 0.33 UJ | 0.24 UJ | 0.23 UJ | 0.37 UJ | 0.22 UJ | 0.093 U |
| 2,4-DB | | 94-82-6 | 0.11 U | 0.33 UJ | 0.24 UJ | 0.23 UJ | 0.37 UJ | 0.22 UJ | 0.093 U |
| Dicamba | | 1918-00-9 | 0.054 U | 0.17 UJ | 0.12 UJ | 0.11 UJ | 0.19 UJ | 0.11 UJ | 0.047 U |
| Dichloroprop | | 120-36-5 | 0.11 U | 0.33 UJ | 0.24 UJ | 0.23 UJ | 0.37 UJ | 0.22 UJ | 0.093 U |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.12 U | 0.37 UJ | 0.27 UJ | 0.26 UJ | 0.42 UJ | 0.25 UJ | 0.1 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED27 | GPEC-SED28 | GPEC-SED28 | GPEC-SED28 | GPEC-SED29 | GPEC-SED29 | GPEC-SED29 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED27(9-11) | GPECSED28(0-0.33) | GPECSED28(11-13) | GPEC-XX-062510B | GPECSED29(0-0.33) | GPECSED29(5.5-7.5) | GPECSED29(12.5-14.5) |
| | | Start Depth | 9 | 0 | 11 | 11 | 0 | 5.5 | 12.5 |
| | | End Depth | 11 | 0.33 | 13 | 13 | 0.33 | 7.5 | 14.5 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 |
| | | Parent Sample Code | | | | GPEC-SED-28(11-13) | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.016 U | 0.05 UJ | 0.036 UJ | 0.034 UJ | 0.056 UJ | 0.034 UJ | 0.014 U |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 11 U | 33 UJ | 24 U | 23 U | 37 UJ | 22 UJ | 9.3 U |
| Silvex | | 93-72-1 | 0.027 U | 0.083 UJ | 0.06 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 U |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.027 U | 0.083 UJ | 0.06 UJ | 0.057 UJ | 0.093 UJ | 0.056 UJ | 0.023 U |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | 0.00014 UJ | **0.00033 J** | R | R | **0.0018 J** | 0.00028 UJ | 0.00012 UJ |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **4400 J** | **17000 J** | **17000 J** | **15300 J** | **16500 J** | **10700 J** | **2740 J** |
| Antimony | | 7440-36-0 | 0.14 UJ | **4.4 J** | **39.7 J** | **61.8 J** | **4.6 J** | **26.9 J** | 0.12 UJ |
| Arsenic | | 7440-38-2 | **1.3 J** | **44.2 J** | **580 J** | **950 J** | **51.7 J** | **168 J** | **0.41 J** |
| Barium | | 7440-39-3 | **26.8 J** | **238 J** | **687 J** | **560 J** | **199 J** | **668 J** | **20.1 J** |
| Beryllium | | 7440-41-7 | **0.2 J** | **0.83 J** | **1 J** | **0.94 J** | **0.88 J** | **0.74 J** | **0.14 J** |
| Cadmium | | 7440-43-9 | **0.074 J** | **31.1 J** | **23.5 J** | **27.6 J** | **40.8 J** | **37.5 J** | **0.032 J** |
| Calcium | | 7440-70-2 | **12500 J** | **18600 J** | **11600 J** | **12200 J** | **15100 J** | **29900 J** | **13600 J** |
| Chromium | | 7440-47-3 | **12.4 J** | **287 J** | **260 J** | **284 J** | **358 J** | **516 J** | **7 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | NA |
| Cobalt | | 7440-48-4 | **4.4 J** | **19.1 J** | **29.7 J** | **36 J** | **19 J** | **19.7 J** | **3.5 J** |
| Copper | | 7440-50-8 | **13.6 J** | **2640 J** | **5400 J** | **15300 J** | **3100 J** | **4500 J** | **8.9 J** |
| Iron | | 7439-89-6 | **12300 J** | **36900 J** | **45500 J** | **51300 J** | **37700 J** | **37500 J** | **8340 J** |
| Lead | | 7439-92-1 | **5.1 J** | **764 J** | **1920 J** | **1530 J** | **730 J** | **1490 J** | **2.6 J** |
| Magnesium | | 7439-95-4 | **7700 J** | **14500 J** | **8230 J** | **6880 J** | **13600 J** | **7690 J** | **6410 J** |
| Manganese | | 7439-96-5 | **159 J** | **271 J** | **325 J** | **389 J** | **309 J** | **222 J** | **155 J** |
| Mercury | | 7439-97-6 | **0.0079** | **2.41 J** | **8.64 J** | **7.45 J** | **2.65 J** | **6.49 J** | **0.0018** |
| Nickel | | 7440-02-0 | **11 J** | **341 J** | **1450 J** | **2270 J** | **429 J** | **1190 J** | **7.4 J** |
| Potassium | | 7440-09-7 | **1520 J** | **4150 J** | **3640 J** | **3050 J** | **4490 J** | **2060 J** | **773 J** |
| Selenium | | 7782-49-2 | **0.26 J** | **5.6 J** | **33.2 J** | **38.1 J** | **6.1 J** | **14.7 J** | **0.099 J** |
| Silver | | 7440-22-4 | **0.029 J** | **16 J** | **28.1 J** | **38 J** | **16.8 J** | **26.3 J** | **0.017 J** |
| Sodium | | 7440-23-5 | **245 J** | **24400 J** | **11700 J** | **12700 J** | **28900 J** | **10700 J** | **143 J** |
| Thallium | | 7440-28-0 | **0.1 J** | **0.53 J** | **1.9 J** | **1.6 J** | **0.68 J** | **0.73 J** | **0.06 J** |
| Tin | | 7440-31-5 | 0.34 U | **106 J** | **280 J** | **194 J** | **61.9 J** | **199 J** | 0.29 U |
| Vanadium | | 7440-62-2 | **19.8 J** | **77 J** | **51.7 J** | **49.9 J** | **76.2 J** | **52.9 J** | **11.9 J** |
| Zinc | | 7440-66-6 | **29.6 J** | **2620 J** | **5610 J** | **6140 J** | **2750 J** | **4840 J** | **18.2 J** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | NA |
| Total Cyanide | | 57-12-5 | 0.68 UJ | **0.53 J** | **21.7 J** | **9.6 J** | **0.66 J** | **3.5 J** | 0.58 UJ |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 33.9 U | 104 UJ | **1060 J** | **1790 J** | 116 UJ | **594 J** | 29.1 U |
| Black Carbon | | BC | **4770 J** | **6450 J** | **13900 J** | **9800 J** | **3350 J** | **26800 J** | **3210 J** |
| Nitrate and Nitrite as N | | NO2/NO3 | 1.4 U | **0.97 J** | **2.6 J** | **2.1 J** | **2.8 J** | **2.6 J** | **0.16 J** |
| pH (s.u.) | | pH | **8.5 J** | **7.6 J** | **7.7 J** | **7.8 J** | **7.3 J** | **7.8 J** | **8.9 J** |
| Sulfide | | 18496-25-8 | **81.4 J** | **4930 J** | **12800 J** | **10100 J** | **4980 J** | **2300 J** | 175 U |
| Total Kjeldahl Nitrogen | | TKN | **496 J** | **8660 J** | **10100 J** | **9950 J** | **46400 J** | **8880 J** | 175 UJ |
| Total Nitrogen | | 7727-37-9 | 50.0 UJ | **8660 J** | **10100 J** | **9950 J** | **46400 J** | **8880 J** | 50.0 UJ |
| Total Organic Carbon | | TOC | **5910 J** | **115000 J** | **157000 J** | **157000 J** | **90600 J** | **194000 J** | **8750 J** |
| Total Phosphorous | | 7723-14-0 | **349 J** | **410 J** | **4870 J** | **605 J** | **846 J** | **867 J** | **285 J** |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED30 | GPEC-SED30 | GPEC-SED30 | GPEC-SED31 | GPEC-SED31 | GPEC-SED31 | GPEC-SB110 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED30(0-0.33) | GPECSED30(4-6) | GPECSED30(8-10) | GPECSED31(0-0.33) | GPECSED31(1.75-3.75) | GPECSED31(5-7) | GPEC-SB-110(44-45) |
| | | Start Depth | 0 | 4 | 8 | 0 | 1.75 | 5 | 44 |
| | | End Depth | 0.33 | 6 | 10 | 0.33 | 3.75 | 7 | 45 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/28/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | 1 UJ | NA | NA | NA | **0.14 J** | NA | 6.5 U |
| Toluene | | 108-88-3 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Ethylbenzene | | 100-41-4 | 1 UJ | NA | NA | NA | **0.13 J** | NA | **2.6 J** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.44 J** | NA | NA | NA | **0.77 J** | NA | 6.5 U |
| Total BTEX | | TBTEX | **0.44** | NA | NA | NA | **1.04** | NA | **2.6** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 4.2 UJ | NA | NA | NA | **0.76 J** | NA | 16 U |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Bromodichloromethane | | 75-27-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Bromoform | | 75-25-2 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| Bromomethane | | 74-83-9 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 2-Butanone | | 78-93-3 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| Carbon disulfide | | 75-15-0 | 1 UJ | NA | NA | NA | **0.22 J** | NA | 6.5 U |
| Carbon tetrachloride | | 56-23-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 UJ |
| Chlorobenzene | | 108-90-7 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Chloroethane | | 75-00-3 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Chloroform | | 67-66-3 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Chloromethane | | 74-87-3 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Cyclohexane | | 110-82-7 | **0.18 J** | NA | NA | NA | **0.2 J** | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| Dibromochloromethane | | 124-48-1 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,2-Dibromoethane | | 106-93-4 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| 1,2-Dichloroethane | | 107-06-2 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,1-Dichloroethene | | 75-35-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,2-Dichloropropane | | 78-87-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| Isopropyl benzene | | 98-82-8 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| Methyl acetate | | 79-20-9 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| Methylcyclohexane | | 108-87-2 | **0.84 J** | NA | NA | NA | **0.87** | NA | NA |
| Methylene chloride | | 75-09-2 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 UJ |
| Styrene | | 100-42-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | 6.5 U |
| Tetrachloroethene | | 127-18-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | 1 UJ | NA | NA | NA | 0.48 UJ | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Trichloroethene | | 79-01-6 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Trichlorofluoromethane | | 75-69-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED30 | GPEC-SED30 | GPEC-SED30 | GPEC-SED31 | GPEC-SED31 | GPEC-SED31 | GPEC-SB110 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED30(0-0.33) | GPECSED30(4-6) | GPECSED30(8-10) | GPECSED31(0-0.33) | GPECSED31(1.75-3.75) | GPECSED31(5-7) | GPEC-SB-110(44-45) |
| | | Start Depth | 0 | 4 | 8 | 0 | 1.75 | 5 | 44 |
| | | End Depth | 0.33 | 6 | 10 | 0.33 | 3.75 | 7 | 45 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/28/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | NA |
| Vinyl chloride | | 75-01-4 | 1 UJ | NA | NA | NA | 0.48 U | NA | 6.5 U |
| Total VOCs | | TVOC | **1.46** | NA | NA | NA | **3.09** | NA | **2.6** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | 6.6 UJ | **21 J** | **5.2** | **8.2 J** | **9.6** | **20** | **8.6** |
| Acenaphthylene | | 208-96-8 | **1.9 J** | **9.1 J** | 2.2 U | **3.9 J** | **2 J** | **2.6** | **0.64 J** |
| Anthracene | | 120-12-7 | **2.1 J** | **30 J** | **1.9 J** | **11 J** | **5.5** | **9.6** | **4.3** |
| Benzo[g,h,i]perylene | | 191-24-2 | **4.3 J** | **11 J** | 2.2 U | **6.1 J** | **2.9 J** | **2.4** | **2.5 J** |
| Fluoranthene | | 206-44-0 | **11 J** | **50 J** | **2.3** | **24 J** | **9.6** | **9.7** | **3.6** |
| Fluorene | | 86-73-7 | 6.6 UJ | **22 J** | **2.2** | **8.3 J** | **7** | **9.6** | **4.7** |
| 2-Methylnaphthalene | | 91-57-6 | 6.6 UJ | **75 J** | **15** | **5.4 J** | **27** | **50** | **19** |
| Naphthalene | | 91-20-3 | 6.6 UJ | **67 J** | **26** | **6 J** | **56** | **150** | **25** |
| Phenanthrene | | 85-01-8 | 6.6 UJ | **130 J** | **7.3** | **46 J** | **33** | **34** | **15** |
| Pyrene | | 129-00-0 | **13 J** | **74 J** | **3.2** | **34 J** | **21** | **21** | **8.3** |
| Benz[a]anthracene | | 56-55-3 | **6.9 J** | **28 J** | **1.2 J** | **12 J** | **7.6** | **7.3** | **2.6** |
| Benzo[a]pyrene | | 50-32-8 | **5.7 J** | **21 J** | 2.2 U | **7.8 J** | **4.7** | **5.9** | **2.3** |
| Benzo[b]fluoranthene | | 205-99-2 | **7.9 J** | **20 J** | 2.2 U | **9.1 J** | **4.6** | **5** | **1.4 J** |
| Benzo[k]fluoranthene | | 207-08-9 | 6.6 UJ | 3.7 UJ | 2.2 U | **2.5 J** | 3.1 U | 2.3 U | **0.5 J** |
| Chrysene | | 218-01-9 | **6.7 J** | **30 J** | **1.2 J** | **13 J** | **7.1** | **8** | **2.3** |
| Dibenz[a,h]anthracene | | 53-70-3 | 6.6 UJ | **2.4 J** | 2.2 U | 6.5 UJ | **1.6 J** | 2.3 U | **1.8** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **3 J** | **7.6 J** | 2.2 U | **4.7 J** | **1.8 J** | **1.5 J** | **2.4** |
| Total PAHs | | TPAH | **62.5** | **598.1** | **65.5** | **202** | **201** | **336.6** | **104.94** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | NA | NA | NA | NA | NA | NA | 1.7 U |
| 1,1-Biphenyl | | 92-52-4 | 32 UJ | **9 J** | **1.5 J** | 32 UJ | **3 J** | **4.5 J** | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **92 J** | **65 J** | 22 U | **100 J** | **25 J** | **2.2 J** | **0.31 J** |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Butyl benzyl phthalate | | 85-68-7 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Caprolactam | | 105-60-2 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | NA |
| Carbazole | | 86-74-8 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | **0.47 J** | 1.7 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 4-Chloroaniline | | 106-47-8 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2-Chloronaphthalene | | 91-58-7 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| 2-Chlorophenol | | 95-57-8 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Dibenzofuran | | 132-64-9 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | **1.9 J** | **0.87 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | 1.7 U |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | 1.7 U |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | 1.7 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 2.1 U |
| 2,4-Dichlorophenol | | 120-83-2 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| Diethyl phthalate | | 84-66-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Dimethyl phthalate | | 131-11-3 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2,4-Dimethylphenol | | 105-67-9 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Di-n-butyl phthalate | | 84-74-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | 11 U |
| 2,4-Dinitrophenol | | 51-28-5 | 170 UJ | 93 UJ | 55 UJ | 160 UJ | 78 U | 57 U | 11 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 1,4-Dioxane | | 123-91-1 | 66 UJ | 36 UJ | 22 U | 64 UJ | 31 U | 22 U | NA |
| Di-n-octyl phthalate | | 117-84-0 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| Hexachlorobutadiene | | 87-68-3 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED30 | GPEC-SED30 | GPEC-SED30 | GPEC-SED31 | GPEC-SED31 | GPEC-SED31 | GPEC-SB110 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED30(0-0.33) | GPECSED30(4-6) | GPECSED30(8-10) | GPECSED31(0-0.33) | GPECSED31(1.75-3.75) | GPECSED31(5-7) | GPEC-SB-110(44-45) |
| | | Start Depth | 0 | 4 | 8 | 0 | 1.75 | 5 | 44 |
| | | End Depth | 0.33 | 6 | 10 | 0.33 | 3.75 | 7 | 45 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/28/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 UJ | 11 UJ | 4.2 U |
| Hexachloroethane | | 67-72-1 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Isophorone | | 78-59-1 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2-Methylphenol | | 95-48-7 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 2-Nitroaniline | | 88-74-4 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | 4.2 U |
| 3-Nitroaniline | | 99-09-2 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | 4.2 U |
| 4-Nitroaniline | | 100-01-6 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | 1.7 U |
| Nitrobenzene | | 98-95-3 | 66 UJ | 36 UJ | 22 U | 64 UJ | 31 U | 22 U | 1.7 U |
| 2-Nitrophenol | | 88-75-5 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| 4-Nitrophenol | | 100-02-7 | 170 UJ | 93 UJ | 55 U | 160 UJ | 78 U | 57 U | 11 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Pentachlorophenol | | 87-86-5 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 4.2 U |
| Phenol | | 108-95-2 | 6.6 UJ | 3.7 UJ | 2.2 U | 6.5 UJ | 3.1 U | 2.3 U | 1.7 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | 1.7 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 11 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 32 UJ | 18 UJ | 11 U | 32 UJ | 15 U | 11 U | 1.7 U |
| Total SVOCs | | TSVOC | **154.5** | **672.1** | **67** | **302** | **229** | **345.67** | **106.12** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | 0.022 U |
| Aroclor 1221 | | 11104-28-2 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | 0.022 U |
| Aroclor 1232 | | 11141-16-5 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | 0.022 U |
| Aroclor 1242 | | 53469-21-9 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | 0.022 U |
| Aroclor 1248 | | 12672-29-6 | **2.5 J** | **5.1 J** | 0.29 U | **12 J** | **0.11 J** | **0.093 J** | 0.022 U |
| Aroclor 1254 | | 11097-69-1 | **4 J** | **10 J** | 0.29 U | **16 J** | **0.22 J** | **0.18 J** | **0.011 J** |
| Aroclor 1260 | | 11096-82-5 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | 0.022 U |
| Aroclor 1262 | | 37324-23-5 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | NA |
| Aroclor 1268 | | 11100-14-4 | 0.8 UJ | 0.49 UJ | 0.29 U | 0.85 UJ | 0.38 U | 0.3 UJ | NA |
| Total PCBs | | 1336-36-3 | **6.5** | **15.1** | ND | **28** | **0.33** | **0.273** | **0.011** |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | **7600 J** | NA | **140** | NA | **840** | **100** | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | **2200 J** | NA | **53 J** | NA | **150** | **43 J** | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | **6100 J** | NA | **74** | NA | **700** | **81** | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | **150 J** | NA | **6.1 J** | NA | **13 J** | **3.3 J** | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | **4400 J** | NA | **110** | NA | **330** | **120** | NA |
| Total HxCDF | | 55684-94-1 | **5000 J** | NA | **120** | NA | **450** | **55** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | **560 J** | NA | **9.4 J** | NA | **58 J** | **7.8 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | **10 J** | NA | 57 U | NA | 70 U | 62 U | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | **1300 J** | NA | **40** | NA | **75** | **36** | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | **1000 J** | NA | **11 J** | NA | **96** | **14 J** | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | **51 J** | NA | **1.6 J** | NA | **2.6 J** | **1.1 J** | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | **120 J** | NA | **4.9 J** | NA | **7.2 J** | **2.2 J** | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | **77 J** | NA | **3.7 J** | NA | **4.6 J** | **2.5 J** | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | **170 J** | NA | **6.8 J** | NA | **13 J** | **2.3 J** | NA |
| Octachlorodibenzofuran | | 39001-02-0 | **4300 J** | NA | **71 J** | NA | **420** | **49 J** | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | **19000 J** | NA | **590** | NA | **1900** | **540** | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | **3400 J** | NA | **87** | NA | **300** | **44** | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | **170 J** | NA | **4.4 J** | NA | **16 J** | **2.5 J** | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | **550 J** | NA | **14** | NA | **25** | **4.5** | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | **49 J** | NA | 57 U | NA | **2.7 J** | 62 U | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | **320 J** | NA | **4.9 J** | NA | **36 J** | **5.9 J** | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | **2500 J** | NA | **61** | NA | **220** | **37** | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | **400 J** | NA | 11 U | NA | **18** | **3.4** | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | **110 J** | NA | 11 U | NA | **12** | **5.1 J** | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | **19 J** | NA | 11 U | NA | **2.0 J** | 12 U | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | 0.08 UJ | 0.049 UJ | 0.029 UJ | **0.15 JN** | 0.038 UJ | 0.03 UJ | NA |
| alpha-bhc | | 319-84-6 | 0.08 UJ | 0.049 UJ | **0.067 J** | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| beta-BHC | | 319-85-7 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED30 | GPEC-SED30 | GPEC-SED30 | GPEC-SED31 | GPEC-SED31 | GPEC-SED31 | GPEC-SB110 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED30(0-0.33) | GPECSED30(4-6) | GPECSED30(8-10) | GPECSED31(0-0.33) | GPECSED31(1.75-3.75) | GPECSED31(5-7) | GPEC-SB-110(44-45) |
| | | Start Depth | 0 | 4 | 8 | 0 | 1.75 | 5 | 44 |
| | | End Depth | 0.33 | 6 | 10 | 0.33 | 3.75 | 7 | 45 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/28/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| delta-BHC | | 319-86-8 | **0.059 J** | 0.049 UJ | 0.029 UJ | **0.16 JN** | 0.038 UJ | 0.03 UJ | NA |
| alpha-chlordane | | 5103-71-9 | 0.08 UJ | **0.092 JN** | 0.029 UJ | **0.39 J** | 0.038 UJ | 0.03 UJ | NA |
| gamma-Chlordane | | 5103-74-2 | **0.18 J** | **0.12 JN** | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| oxy-Chlordane | | 27304-13-8 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | 0.08 UJ | **0.14 JN** | 0.029 UJ | **0.17 JN** | 0.038 UJ | 0.03 UJ | NA |
| o,p'-DDE | | 3424-82-6 | 0.08 UJ | **0.15 J** | 0.029 UJ | **0.14 JN** | **0.0042 J** | 0.03 UJ | NA |
| 4,4'-DDE | | 72-55-9 | **0.083 JN** | **0.33 JN** | 0.029 UJ | **0.48 JN** | 0.038 UJ | 0.03 UJ | NA |
| o,p'-DDT | | 789-02-6 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| 4,4'-DDT | | 50-29-3 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Dieldrin | | 60-57-1 | 0.08 UJ | **0.22 J** | 0.029 UJ | **0.28 J** | 0.038 UJ | 0.03 UJ | NA |
| Endosulfan I | | 959-98-8 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Endosulfan II | | 33213-65-9 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Endosulfan sulfate | | 1031-07-8 | 0.08 UJ | **0.075 JN** | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Endrin | | 72-20-8 | **0.082 J** | **0.19 J** | 0.029 UJ | **0.35 J** | 0.038 UJ | 0.03 UJ | NA |
| Endrin aldehyde | | 7421-93-4 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Endrin ketone | | 53494-70-5 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Heptachlor | | 76-44-8 | 0.08 UJ | **0.062 J** | 0.029 UJ | **0.12 JN** | 0.038 UJ | 0.03 UJ | NA |
| Heptachlor epoxide | | 1024-57-3 | **0.057 J** | 0.049 UJ | 0.029 UJ | **0.13 JN** | 0.038 UJ | 0.03 UJ | NA |
| Hexachlorobenzene | | 118-74-1 | 0.08 UJ | **0.057 J** | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Methoxychlor | | 72-43-5 | 0.16 UJ | 0.098 UJ | 0.057 UJ | 0.17 UJ | 0.077 UJ | 0.059 UJ | NA |
| Mirex | | 2385-85-5 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| Mitotane | | 53-19-0 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| cis-Nonachlor | | 5103-73-1 | 0.08 UJ | 0.049 UJ | 0.029 UJ | 0.085 UJ | 0.038 UJ | 0.03 UJ | NA |
| trans-Nonachlor | | 39765-80-5 | 3.2 UJ | 2 UJ | 1.1 UJ | 3.4 UJ | 1.5 UJ | 1.2 UJ | NA |
| Toxaphene | | 8001-35-2 | 3.2 UJ | 2 UJ | 1.1 UJ | 3.4 UJ | 1.5 UJ | 1.2 UJ | NA |
| Total Pesticides | | TPEST | **0.461** | **1.436** | **0.067** | **2.37** | **0.0042** | ND | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | **0.000027 J** | 0.00036 U | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | **0.000041 J** | 0.00036 U | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | **0.000056 J** | 0.00036 U | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | **0.0081** | **0.00039** | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | **0.011** | **0.00053** | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | **0.014** | **0.00045** | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | **0.001** | **0.000068 J** | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | **0.015** | **0.00087** | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | **0.0014** | **0.00018 J** | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | 0.00043 U | 0.00036 UJ | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | **0.0087** | **0.00046** | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | 0.00043 U | **0.00029 J** | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | 0.00043 U | **0.00024 J** | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | 0.00043 U | **0.000032 J** | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | 0.00043 U | 0.00036 U | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | 0.00043 U | **0.000006 J** | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | **0.0029** | 0.00036 U | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | **0.0059 J** | **0.0013 J** | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | **0.00016 J** | **0.000011 J** | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | **0.0067** | **0.00028 J** | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | **0.0016** | **0.000085 J** | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | **0.0028** | **0.00011 J** | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | 0.11 U | 0.089 U | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | **0.079384** | **0.005302** | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | 33 UJ | 20 UJ | 12 U | 34 UJ | 15 U | 12 U | NA |
| 2,4-D | | 94-75-7 | 0.33 UJ | 0.2 UJ | 0.12 U | 0.34 UJ | 0.15 U | 0.12 U | NA |
| 2,4-DB | | 94-82-6 | 0.33 UJ | 0.2 UJ | 0.12 U | 0.34 UJ | 0.15 U | 0.12 U | NA |
| Dicamba | | 1918-00-9 | 0.17 UJ | **0.023 J** | 0.059 U | 0.17 UJ | 0.077 U | 0.061 U | NA |
| Dichloroprop | | 120-36-5 | 0.33 UJ | 0.2 UJ | 0.12 U | 0.34 UJ | 0.15 U | 0.12 U | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | 0.38 UJ | 0.22 UJ | 0.13 U | 0.38 UJ | 0.17 U | 0.14 U | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SED30 | GPEC-SED30 | GPEC-SED30 | GPEC-SED31 | GPEC-SED31 | GPEC-SED31 | GPEC-SB110 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPECSED30(0-0.33) | GPECSED30(4-6) | GPECSED30(8-10) | GPECSED31(0-0.33) | GPECSED31(1.75-3.75) | GPECSED31(5-7) | GPEC-SB-110(44-45) |
| | | Start Depth | 0 | 4 | 8 | 0 | 1.75 | 5 | 44 |
| | | End Depth | 0.33 | 6 | 10 | 0.33 | 3.75 | 7 | 45 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/25/2010 | 6/28/2010 |
| | | Parent Sample Code | | | | | | | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | 0.05 UJ | 0.03 UJ | 0.018 UJ | 0.051 UJ | 0.023 UJ | 0.018 UJ | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | 33 UJ | **19 J** | 12 U | 34 U | 15 U | 12 U | NA |
| Silvex | | 93-72-1 | 0.084 UJ | 0.049 UJ | 0.029 U | 0.085 UJ | 0.038 U | 0.03 U | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | 0.084 UJ | 0.049 UJ | 0.029 U | 0.085 UJ | 0.038 U | 0.03 U | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | **0.0013 J** | R | 0.00015 UJ | **0.0013 J** | **0.00019 J** | 0.00015 UJ | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **17500 J** | **14400 J** | **9710 J** | **16900 J** | **10900 J** | **9300 J** | **3150** |
| Antimony | | 7440-36-0 | **5.6 J** | **28.9 J** | **0.17 J** | **32.3 J** | **13.5 J** | **0.3 J** | 5.3 U |
| Arsenic | | 7440-38-2 | **71.5 J** | **317 J** | **8.8 J** | **285 J** | **127 J** | **11 J** | 6.8 UJ |
| Barium | | 7440-39-3 | **210 J** | **293 J** | **64 J** | **343 J** | **158 J** | **28.3 J** | **16** |
| Beryllium | | 7440-41-7 | **0.99 J** | **1.4 J** | **0.44 J** | **1.4 J** | **0.83 J** | **0.48 J** | **0.097 J** |
| Cadmium | | 7440-43-9 | **56.5 J** | **118 J** | **0.25 J** | **232 J** | **81 J** | **0.94 J** | 1.6 U |
| Calcium | | 7440-70-2 | **16300 J** | **27500 J** | **16200 J** | **33700 J** | **12800 J** | **2830 J** | **14900** |
| Chromium | | 7440-47-3 | **448 J** | **1120 J** | **25.2 J** | **1390 J** | **479 J** | **23.8** | **9.2** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | NA | NA | NA | NA | NA | NA | R |
| Cobalt | | 7440-48-4 | **23.4 J** | **43.6 J** | **9.1 J** | **65.4 J** | **23.5 J** | **6.5** | **3.4** |
| Copper | | 7440-50-8 | **4410 J** | **2610 J** | **56.6 J** | **13600 J** | **6110 J** | **116 J** | **19** |
| Iron | | 7439-89-6 | **38300 J** | **45200 J** | **21000 J** | **47100 J** | **32100 J** | **19500** | **6670** |
| Lead | | 7439-92-1 | **899 J** | **1680 J** | **16.1 J** | **1630 J** | **745 J** | **31 J** | **2.2 J** |
| Magnesium | | 7439-95-4 | **13300 J** | **7510 J** | **10800 J** | **10500 J** | **5880 J** | **4720 J** | **7680** |
| Manganese | | 7439-96-5 | **332 J** | **289 J** | **394 J** | **441 J** | **284 J** | **280 J** | **145** |
| Mercury | | 7439-97-6 | **1.14 J** | **0.761 J** | **0.225** | **2.51 J** | **0.265** | **0.0387** | **0.12 J** |
| Nickel | | 7440-02-0 | **623 J** | **3450 J** | **28.3 J** | **4210 J** | **2550 J** | **37.3** | **10.7** |
| Potassium | | 7440-09-7 | **4410 J** | **2900 J** | **3450 J** | **4200 J** | **2500 J** | **2170 J** | **834** |
| Selenium | | 7782-49-2 | **7.9 J** | **13.9 J** | **0.82 J** | **13.5 J** | **9.4 J** | **1.3 J** | 12.1 U |
| Silver | | 7440-22-4 | **21 J** | **34.5 J** | **0.15 J** | **52.4 J** | **19.1 J** | **0.39 J** | 1.6 U |
| Sodium | | 7440-23-5 | **24000 J** | **12100 J** | **1260 J** | **25600 J** | **8880 J** | **2700 J** | **193** |
| Thallium | | 7440-28-0 | **0.71 J** | **0.9 J** | **0.23 J** | **0.72 J** | **0.43 J** | **0.15 J** | 4.8 U |
| Tin | | 7440-31-5 | **74.6 J** | **194 J** | **1.5** | **149 J** | **73.1** | **2.2** | |
| Vanadium | | 7440-62-2 | **83 J** | **102 J** | **31.6 J** | **126 J** | **66.4 J** | **21.8 J** | **12.7** |
| Zinc | | 7440-66-6 | **3540 J** | **2040 J** | **69.3 J** | **13900 J** | **4470 J** | **106 J** | **28.8** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | NA | NA | NA | NA | NA | NA | 0.26 U |
| Total Cyanide | | 57-12-5 | 2.1 UJ | **3.6 J** | 0.73 UJ | **4.7 J** | 0.96 UJ | 0.76 UJ | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | 104 UJ | **1080 J** | 36.7 U | 106 UJ | **452** | **123** | NA |
| Black Carbon | | BC | **3980 J** | **7590 J** | **7060 J** | **5410 J** | **5280 J** | **2430 J** | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | **1.3 J** | **1.9 J** | **0.81 J** | **1.5 J** | **0.74 J** | **2.1** | NA |
| pH (s.u.) | | pH | **7.3 J** | **7.9 J** | **8.4 J** | **7.8 J** | **7.8 J** | **8.2 J** | NA |
| Sulfide | | 18496-25-8 | **3140 J** | **4220 J** | **622** | **7630 J** | **1320** | **145 J** | NA |
| Total Kjeldahl Nitrogen | | TKN | **8110 J** | **9200 J** | **1030 J** | **7660 J** | **3290 J** | **2940 J** | NA |
| Total Nitrogen | | 7727-37-9 | **8110 J** | **9200 J** | **1030 J** | **7660 J** | **3290 J** | **2940 J** | NA |
| Total Organic Carbon | | TOC | **95800 J** | **144000 J** | **9980 J** | **117000 J** | **90200 J** | **21400 J** | **8860** |
| Total Phosphorous | | 7723-14-0 | **1120 J** | **4050 J** | **49.4 J** | **1290 J** | **180 J** | **133 J** | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB110 | GPEC-SB110 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB112 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-110(64-65) | GPEC-SB-110(99-100) | GPEC-SB-111(44-45) | GPEC-SB-111(48-49) | GPEC-SB-111(104-105) | GPECXX070210 | GPEC-SB-112(42-43) |
| | | Start Depth | 64 | 99 | 44 | 48 | 104 | 104 | 42 |
| | | End Depth | 65 | 100 | 45 | 49 | 105 | 105 | 43 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/29/2010 | 6/30/2010 | 6/30/2010 | 6/30/2010 | 7/2/2010 | 7/2/2010 | 7/6/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB-111(104-105) | |
| Analyte | Units | CAS No. | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | |
| Benzene | | 71-43-2 | **0.0014 J** | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Toluene | | 108-88-3 | **0.0027 J** | **0.00067 J** | 120 U | 61 U | **0.0024 J** | **0.0025 J** | 12 U |
| Ethylbenzene | | 100-41-4 | **0.0023 J** | 0.0058 U | **53 J** | **40 J** | 0.0056 U | 0.0056 U | **20** |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **0.0025 J** | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | **18** |
| Total BTEX | | TBTEX | **0.0089** | **0.00067** | **53** | **40** | **0.0024** | **0.0025** | **38** |
| **Other VOCs** | mg/kg | | | | | | | | |
| Acetone | | 67-64-1 | 0.026 UJ | 0.023 UJ | 290 U | 150 U | 0.022 UJ | 0.023 UJ | 31 U |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Bromodichloromethane | | 75-27-4 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Bromoform | | 75-25-2 | 0.0066 UJ | 0.0058 UJ | 120 U | 61 UJ | 0.0056 UJ | 0.0056 UJ | 12 U |
| Bromomethane | | 74-83-9 | 0.013 U | 0.012 U | 120 U | 61 U | 0.011 U | 0.011 U | 12 U |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | **0.0013 J** | 0.0058 U | 120 U | 61 U | 0.0056 UJ | 0.0056 U | 12 U |
| Carbon tetrachloride | | 56-23-5 | 0.0066 U | 0.0058 U | 120 UJ | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Chlorobenzene | | 108-90-7 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Chloroethane | | 75-00-3 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Chloroform | | 67-66-3 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Chloromethane | | 74-87-3 | 0.0066 U | 0.0058 U | 120 U | 61 UJ | 0.0056 U | 0.0056 U | 12 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,2-Dichloroethane | | 107-06-2 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,1-Dichloroethene | | 75-35-4 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,2-Dichloropropane | | 78-87-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 0.013 U | 0.012 U | 120 U | 61 U | 0.011 U | 0.011 U | 12 U |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | 0.026 U | 0.023 U | 120 UJ | 61 UJ | 0.022 U | 0.023 U | **2.7 J** |
| Styrene | | 100-42-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Tetrachloroethene | | 127-18-4 | **0.0044 J** | 0.0058 U | 120 U | 61 U | **0.0026 J** | **0.0034 J** | 12 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Trichloroethene | | 79-01-6 | **0.028** | **0.007** | 120 U | 61 U | **0.026** | **0.03** | 12 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB110 | GPEC-SB110 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB112 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-110(64-65) | GPEC-SB-110(99-100) | GPEC-SB-111(44-45) | GPEC-SB-111(48-49) | GPEC-SB-111(104-105) | GPECXX070210 | GPEC-SB-112(42-43) |
| | | Start Depth | 64 | 99 | 44 | 48 | 104 | 104 | 42 |
| | | End Depth | 65 | 100 | 45 | 49 | 105 | 105 | 43 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/29/2010 | 6/30/2010 | 6/30/2010 | 6/30/2010 | 7/2/2010 | 7/2/2010 | 7/6/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB-111(104-105) | |
| Analyte | Units | CAS No. | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 0.0066 U | 0.0058 U | 120 U | 61 U | 0.0056 U | 0.0056 U | 12 U |
| Total VOCs | | TVOC | **0.0426** | **0.00767** | **53** | **40** | **0.031** | **0.0359** | **40.7** |
| **PAHs** | mg/kg | | | | | | | | |
| Acenaphthene | | 83-32-9 | **0.81** | 0.31 U | **230** | **100** | 0.29 U | 0.3 U | **190** |
| Acenaphthylene | | 208-96-8 | **0.12 J** | 0.31 U | **17 J** | **5.6 J** | 0.29 U | 0.3 U | **13 J** |
| Anthracene | | 120-12-7 | **0.64** | 0.31 U | **98 J** | **46** | 0.29 U | 0.3 U | **89** |
| Benzo[g,h,i]perylene | | 191-24-2 | **0.5 J** | 0.31 UJ | **180 J** | **42 J** | 0.29 UJ | 0.3 UJ | **86** |
| Fluoranthene | | 206-44-0 | **0.68** | 0.31 U | **91 J** | **37** | 0.29 U | 0.3 U | **99** |
| Fluorene | | 86-73-7 | **0.52** | 0.31 U | **120 J** | **50** | 0.29 U | 0.3 U | **120** |
| 2-Methylnaphthalene | | 91-57-6 | **0.016 J** | **0.012 J** | **570** | **250** | 0.29 U | 0.3 U | **310** |
| Naphthalene | | 91-20-3 | 0.35 U | **0.027 J** | **1600** | **430** | 0.29 U | 0.3 U | **1200** |
| Phenanthrene | | 85-01-8 | **2.3** | **0.018 J** | **360** | **170** | 0.29 U | 0.3 U | **320** |
| Pyrene | | 129-00-0 | **1.8** | 0.31 U | **180** | **84** | 0.29 U | 0.3 U | **180** |
| Benz[a]anthracene | | 56-55-3 | **0.52** | 0.31 U | **74 J** | **28 J** | 0.29 U | 0.3 U | **72** |
| Benzo[a]pyrene | | 50-32-8 | **0.47** | 0.31 U | **61 J** | **23 J** | 0.29 U | 0.3 U | **61 J** |
| Benzo[b]fluoranthene | | 205-99-2 | **0.29 J** | 0.31 U | **41 J** | **14 J** | 0.29 U | 0.3 U | **45 J** |
| Benzo[k]fluoranthene | | 207-08-9 | **0.11 J** | 0.31 U | **15 J** | **5.7 J** | 0.29 U | 0.3 U | **15 J** |
| Chrysene | | 218-01-9 | **0.46** | 0.31 U | **72 J** | **24 J** | 0.29 U | 0.3 U | **78** |
| Dibenz[a,h]anthracene | | 53-70-3 | **0.36** | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | **70** |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **0.51** | 0.31 U | **180** | **42** | 0.29 U | 0.3 U | **84** |
| Total PAHs | | TPAH | **10.106** | **0.057** | **3889** | **1351.3** | ND | ND | **3032** |
| **Other SVOCs** | mg/kg | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | **0.037 J** | **0.034 J** | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Butyl benzyl phthalate | | 85-68-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | **5.5 J** |
| 4-Chloro-3-methylphenol | | 59-50-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4-Chloroaniline | | 106-47-8 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Chloronaphthalene | | 91-58-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Chlorophenol | | 95-57-8 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Dibenzofuran | | 132-64-9 | **0.092 J** | 0.31 U | **19 J** | **9 J** | 0.29 U | 0.3 U | **14 J** |
| 1,2-Dichlorobenzene | | 95-50-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 0.43 U | 0.38 U | 190 U | 40 U | 0.36 U | 0.37 U | 81 U |
| 2,4-Dichlorophenol | | 120-83-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Diethyl phthalate | | 84-66-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Dimethyl phthalate | | 131-11-3 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2,4-Dimethylphenol | | 105-67-9 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Di-n-butyl phthalate | | 84-74-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 2.2 U | 2 U | 980 U | 210 U | 1.8 UJ | 1.9 U | 420 U |
| 2,4-Dinitrophenol | | 51-28-5 | 2.2 U | 2 U | 980 U | 210 U | 1.8 UJ | 1.9 U | 420 U |
| 2,4-Dinitrotoluene | | 121-14-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Hexachlorobutadiene | | 87-68-3 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB110 | GPEC-SB110 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB112 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-110(64-65) | GPEC-SB-110(99-100) | GPEC-SB-111(44-45) | GPEC-SB-111(48-49) | GPEC-SB-111(104-105) | GPECXX070210 | GPEC-SB-112(42-43) |
| | | Start Depth | 64 | 99 | 44 | 48 | 104 | 104 | 42 |
| | | End Depth | 65 | 100 | 45 | 49 | 105 | 105 | 43 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/29/2010 | 6/30/2010 | 6/30/2010 | 6/30/2010 | 7/2/2010 | 7/2/2010 | 7/6/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB-111(104-105) | |
| Analyte | Units | CAS No. | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | 0.87 U | 0.77 U | 390 U | 82 U | R | 0.75 U | 160 U |
| Hexachloroethane | | 67-72-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Isophorone | | 78-59-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Methylphenol | | 95-48-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Nitroaniline | | 88-74-4 | 0.87 U | 0.77 U | 390 U | 82 U | 0.72 U | 0.75 U | 160 U |
| 3-Nitroaniline | | 99-09-2 | 0.87 U | 0.77 U | 390 U | 82 U | 0.72 U | 0.75 U | 160 U |
| 4-Nitroaniline | | 100-01-6 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Nitrobenzene | | 98-95-3 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2-Nitrophenol | | 88-75-5 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 4-Nitrophenol | | 100-02-7 | 2.2 U | 2 U | 980 U | 210 U | 1.8 UJ | 1.9 U | 420 U |
| N-Nitrosodimethylamine | | 62-75-9 | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| N-Nitrosodiphenylamine | | 86-30-6 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Pentachlorophenol | | 87-86-5 | 0.87 U | 0.77 U | 390 U | 82 U | 0.72 UJ | 0.75 U | 160 U |
| Phenol | | 108-95-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Pyridine | | 110-86-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | 2.2 U | 2 U | 980 U | 210 U | 1.8 U | 1.9 U | 420 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | 0.35 U | 0.31 U | 160 U | 33 U | 0.29 U | 0.3 U | 66 U |
| Total SVOCs | | TSVOC | **10.235** | **0.091** | **3908** | **1360.3** | ND | ND | **3051.5** |
| **PCBS** | mg/kg | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1221 | | 11104-28-2 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1232 | | 11141-16-5 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1242 | | 53469-21-9 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1248 | | 12672-29-6 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1254 | | 11097-69-1 | 0.022 U | 0.019 U | **0.019 J** | **0.0045 J** | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1260 | | 11096-82-5 | 0.022 U | 0.019 U | 0.02 U | 0.021 U | 0.019 U | 0.019 U | 0.021 UJ |
| Aroclor 1262 | | 37324-23-5 | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | ND | ND | **0.019** | **0.0045** | ND | ND | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-SB110 | GPEC-SB110 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB112 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-110(64-65) | GPEC-SB-110(99-100) | GPEC-SB-111(44-45) | GPEC-SB-111(48-49) | GPEC-SB-111(104-105) | GPECXX070210 | GPEC-SB-112(42-43) |
| | | Start Depth | 64 | 99 | 44 | 48 | 104 | 104 | 42 |
| | | End Depth | 65 | 100 | 45 | 49 | 105 | 105 | 43 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/29/2010 | 6/30/2010 | 6/30/2010 | 6/30/2010 | 7/2/2010 | 7/2/2010 | 7/6/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB-111(104-105) | |
| Analyte | Units | CAS No. | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB110 | GPEC-SB110 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB111 | GPEC-SB112 |
|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-110(64-65) | GPEC-SB-110(99-100) | GPEC-SB-111(44-45) | GPEC-SB-111(48-49) | GPEC-SB-111(104-105) | GPECXX070210 | GPEC-SB-112(42-43) |
| | | Start Depth | 64 | 99 | 44 | 48 | 104 | 104 | 42 |
| | | End Depth | 65 | 100 | 45 | 49 | 105 | 105 | 43 |
| | | Depth Unit | ft | ft | ft | ft | ft | ft | ft |
| | | Sample Date | 6/29/2010 | 6/30/2010 | 6/30/2010 | 6/30/2010 | 7/2/2010 | 7/2/2010 | 7/6/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB-111(104-105) | |
| Analyte | Units | CAS No. | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | |
| Aluminum | | 7429-90-5 | **2570** | **10200** | **3570** | **4190** | **7490** | **7190** | **2480** |
| Antimony | | 7440-36-0 | 5.2 U | 4.7 U | **1.4 J** | 5 U | 4.5 UJ | 4.4 U | 5 U |
| Arsenic | | 7440-38-2 | 6.7 UJ | **5 J** | **15.2** | **5.9 J** | **4.7** | **3.1 J** | 6.3 UJ |
| Barium | | 7440-39-3 | **12.6** | **68.4** | **41.7** | **21.4** | **40.9** | **47.9** | **9.6** |
| Beryllium | | 7440-41-7 | **0.092 J** | **0.7 J** | **0.13 J** | **0.14 J** | **0.59 J** | **0.52 J** | **0.076 J** |
| Cadmium | | 7440-43-9 | 1.6 U | 1.4 U | **0.41 J** | 1.5 U | 1.4 U | 1.3 U | 1.5 U |
| Calcium | | 7440-70-2 | **10000** | **1330** | **7650** | **12400** | **3050** | **4310** | **11400** |
| Chromium | | 7440-47-3 | **5.9** | **18.3** | **14.8** | **10.8** | **15.6** | **13.2** | **5.6** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | R | R | R | R | R | R | 2.5 U |
| Cobalt | | 7440-48-4 | **2.4** | **13.3** | **4** | **3.9** | **8.7** | **8.1** | **2.4** |
| Copper | | 7440-50-8 | **9.7** | **25.6** | **190** | **12.4** | **21.9 J** | **17.4 J** | **9.8** |
| Iron | | 7439-89-6 | **6720** | **27200** | **8610** | **9210** | **29900** | **29300** | **5550** |
| Lead | | 7439-92-1 | 4.8 U | **16.3** | **54.1** | **1.7 J** | **12.1** | **8.5** | **2.5 J** |
| Magnesium | | 7439-95-4 | **4730** | **3240** | **4610** | **7250** | **3470** | **3540** | **5970** |
| Manganese | | 7439-96-5 | **120** | **580** | **133** | **173** | **476 J** | **579 J** | **147** |
| Mercury | | 7439-97-6 | 0.061 UJ | **0.011 J** | **0.23** | **0.0051 J** | **0.0075 J** | **0.007 J** | 0.054 UJ |
| Nickel | | 7440-02-0 | **6.7** | **20** | **45.2** | **10.9** | **16.1** | **15.1** | **6.6** |
| Potassium | | 7440-09-7 | **696** | **1310** | **715** | **1070** | **1190** | **1090** | **471** |
| Selenium | | 7782-49-2 | 11.9 U | 10.7 U | 10.6 U | 11.3 U | 10.3 U | 10.1 U | 11.3 U |
| Silver | | 7440-22-4 | 1.6 U | **0.23 J** | **0.36 J** | 1.5 U | **0.38 J** | **0.35 J** | 1.5 U |
| Sodium | | 7440-23-5 | **485** | **935** | **702** | **469** | **1510** | **964** | **579** |
| Thallium | | 7440-28-0 | 4.8 U | 4.3 U | 4.2 U | 4.5 U | 4.1 U | 4 U | 4.5 U |
| Tin | | 7440-31-5 | | | | | | | |
| Vanadium | | 7440-62-2 | **9.6** | **21.1** | **13.9** | **17.2** | **20.8 J** | **16.1** | **9.4** |
| Zinc | | 7440-66-6 | **14.2** | **68.1** | **133** | **21.6** | **45.1** | **43.2** | **12.9** |
| **Cyanides** | mg/kg | | | | | | | | |
| Free Cyanide | | FREECN | 0.26 U | 0.23 U | 0.24 U | 0.25 U | 0.22 U | 0.23 U | 0.25 U |
| Total Cyanide | | 57-12-5 | NA | NA | NA | NA | NA | NA | NA |
| **Other** | mg/kg | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **7220** | **9580** | **49300** | **30600** | **17000** | **7380** | **31000** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB112 | GPEC-SB112 | GPEC-SB112 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB114 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-112(53-54) | GPEC-SB-112(78-79) | GPEC-SB112(112-114) | GPEC-SB113(62-63) | GPEC-SB113(120-121) | GPEC-XX-071910 | GPEC-SB113(130-132) | GPEC-SB-114(110-111) |
| | | Start Depth | 53 | 78 | 112 | 62 | 120 | | 130 | 110 |
| | | End Depth | 54 | 79 | 114 | 63 | 121 | | 132 | 110 |
| | | Depth Unit | ft | ft | ft | ft | ft | | ft | ft |
| | | Sample Date | 7/6/2010 | 7/7/2010 | 7/12/2010 | 7/14/2010 | 7/19/2010 | 7/19/2010 | 7/19/2010 | 7/22/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB113(120-121) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| **BTEX** | mg/kg | | | | | | | | | |
| Benzene | | 71-43-2 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Toluene | | 108-88-3 | 13 U | **2.4 J** | 0.027 U | **0.00022 J** | **0.00088 J** | **0.00029 J** | 0.0056 U | **0.00018 J** |
| Ethylbenzene | | 100-41-4 | **16** | **16** | 0.027 U | **0.002 J** | **0.022** | **0.011** | 0.0056 U | 0.0061 U |
| m,p-Xylene | | 108383/106423 | NA | NA | NA | NA | NA | NA | NA | NA |
| o-Xylene | | 95-47-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Xylene | | 1330-20-7 | **19** | **19** | 0.027 U | **0.0021 J** | **0.04 J** | **0.022 J** | 0.0056 U | 0.0061 U |
| Total BTEX | | TBTEX | **35** | **37.4** | ND | **0.00432** | **0.06288** | **0.03329** | ND | **0.00018** |
| **Other VOCs** | mg/kg | | | | | | | | | |
| Acetone | | 67-64-1 | 32 U | 31 U | 0.11 U | 0.023 UJ | 0.023 UJ | 0.022 UJ | 0.022 UJ | 0.055 UJ |
| Acrolein (propenal) | | 107-02-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Acrylonitrile | | 107-13-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Bromochloromethane | | 74-97-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Bromodichloromethane | | 75-27-4 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Bromoform | | 75-25-2 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Bromomethane | | 74-83-9 | 13 U | 12 U | 0.053 U | 0.012 U | 0.011 U | 0.011 U | 0.011 U | 0.012 U |
| 2-Butanone | | 78-93-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbon disulfide | | 75-15-0 | 13 U | 12 U | 0.027 U | 0.0058 U | **0.0024 J** | **0.0017 J** | 0.0056 U | 0.0061 U |
| Carbon tetrachloride | | 56-23-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Chlorobenzene | | 108-90-7 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Chloroethane | | 75-00-3 | 13 U | 12 U | 0.027 UJ | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Chloroform | | 67-66-3 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Chloromethane | | 74-87-3 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Cyclohexane | | 110-82-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dibromo-3-chloropropane | | 96-12-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibromochloromethane | | 124-48-1 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,2-Dibromoethane | | 106-93-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-Dichlorobenzene | | 95-50-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | | 541-73-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | | 106-46-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichlorodifluoromethane | | 75-71-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-Dichloroethane | | 75-34-3 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,2-Dichloroethane | | 107-06-2 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| cis-1,2-Dichloroethene | | 156-59-2 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| trans-1,2-Dichloroethene | | 156-60-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,1-Dichloroethene | | 75-35-4 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,2-Dichloropropane | | 78-87-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| cis-1,3-Dichloropropene | | 10061-01-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| trans-1,3-Dichloropropene | | 10061-02-6 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Diisopropyl ether | | 108-20-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Hexanone | | 591-78-6 | 13 U | 12 U | 0.053 U | 0.012 U | 0.011 U | 0.011 U | 0.011 U | 0.012 U |
| Isopropyl benzene | | 98-82-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl acetate | | 79-20-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methyl tert-butyl ether | | 1634-04-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-Methyl-2-pentanone | | 108-10-1 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Methylcyclohexane | | 108-87-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylene chloride | | 75-09-2 | **2.8 J** | **2.8 J** | 0.11 U | 0.023 U | 0.023 U | 0.022 U | 0.022 U | 0.024 U |
| Styrene | | 100-42-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,1,2,2-Tetrachloroethane | | 79-34-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Tetrachloroethene | | 127-18-4 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 76-13-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-Trichlorobenzene | | 87-61-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-Trichloroethane | | 71-55-6 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| 1,1,2-Trichloroethane | | 79-00-5 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Trichloroethene | | 79-01-6 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Trichlorofluoromethane | | 75-69-4 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB112 | GPEC-SB112 | GPEC-SB112 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB114 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-112(53-54) | GPEC-SB-112(78-79) | GPEC-SB112(112-114) | GPEC-SB113(62-63) | GPEC-SB113(120-121) | GPEC-XX-071910 | GPEC-SB113(130-132) | GPEC-SB-114(110-111) |
| | | Start Depth | 53 | 78 | 112 | 62 | 120 | | 130 | 110 |
| | | End Depth | 54 | 79 | 114 | 63 | 121 | | 132 | 110 |
| | | Depth Unit | ft | ft | ft | ft | ft | | ft | ft |
| | | Sample Date | 7/6/2010 | 7/7/2010 | 7/12/2010 | 7/14/2010 | 7/19/2010 | 7/19/2010 | 7/19/2010 | 7/22/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB113(120-121) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| 1,2,3-Trichloropropane | | 96-18-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl acetate | | 108-05-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Vinyl chloride | | 75-01-4 | 13 U | 12 U | 0.027 U | 0.0058 U | 0.0057 U | 0.0056 U | 0.0056 U | 0.0061 U |
| Total VOCs | | TVOC | **37.8** | **40.2** | ND | **0.00432** | **0.06528** | **0.03499** | ND | **0.00018** |
| **PAHs** | mg/kg | | | | | | | | | |
| Acenaphthene | | 83-32-9 | **430** | **120** | 0.29 U | **2.3 J** | **0.52** | **0.36** | 0.3 U | 0.33 U |
| Acenaphthylene | | 208-96-8 | **24 J** | **31 J** | 0.29 U | **1.2 J** | **0.14 J** | **0.087 J** | 0.3 U | 0.33 U |
| Anthracene | | 120-12-7 | **190 J** | **68** | **0.014 J** | **2.5 J** | **0.47** | **0.33** | 0.3 U | 0.33 U |
| Benzo[g,h,i]perylene | | 191-24-2 | **390** | **44** | 0.29 U | **0.77** | **0.23 J** | **0.11 J** | 0.3 U | 0.33 U |
| Fluoranthene | | 206-44-0 | **190 J** | **68** | **0.019 J** | **2.6** | **0.71** | **0.52** | 0.3 U | 0.33 U |
| Fluorene | | 86-73-7 | **240 J** | **86** | **0.018 J** | **2.4 J** | **0.46** | **0.32** | 0.3 U | 0.33 U |
| 2-Methylnaphthalene | | 91-57-6 | **850** | **180** | **0.015 J** | 0.61 U | **1.1** | **0.73** | 0.3 U | 0.33 U |
| Naphthalene | | 91-20-3 | **2900** | **610** | **0.02 J** | 0.61 U | **1.6 J** | **0.95 J** | 0.3 U | 0.33 U |
| Phenanthrene | | 85-01-8 | **710** | **250** | **0.069 J** | **8.7 J** | **1.9** | **1.3** | 0.3 U | 0.33 U |
| Pyrene | | 129-00-0 | **320 J** | **140** | **0.026 J** | **5.2 J** | **1.3** | **0.8** | 0.3 U | 0.33 U |
| Benz[a]anthracene | | 56-55-3 | **110 J** | **40** | **0.01 J** | **1.3** | **0.4** | **0.28 J** | 0.3 U | 0.33 U |
| Benzo[a]pyrene | | 50-32-8 | **79 J** | **36** | 0.29 U | **1.3** | **0.33** | **0.2 J** | 0.3 U | 0.33 U |
| Benzo[b]fluoranthene | | 205-99-2 | **49 J** | **22 J** | 0.29 U | **0.72** | **0.24 J** | **0.14 J** | 0.3 U | 0.33 U |
| Benzo[k]fluoranthene | | 207-08-9 | 340 U | **9.8 J** | 0.29 U | **0.24 J** | **0.093 J** | **0.062 J** | 0.3 U | 0.33 U |
| Chrysene | | 218-01-9 | **85 J** | **34** | 0.29 U | **1** | **0.47** | **0.29 J** | 0.3 U | 0.33 U |
| Dibenz[a,h]anthracene | | 53-70-3 | 340 U | 33 U | 0.29 U | **0.09 J** | **0.24 J** | 0.3 U | 0.3 U | 0.33 U |
| Indeno[1,2,3-cd]pyrene | | 193-39-5 | **420** | **43** | 0.29 U | **0.69** | **0.15 J** | 0.3 U | 0.3 U | 0.33 U |
| Total PAHs | | TPAH | **6987** | **1781.8** | **0.191** | **31.01** | **10.353** | **6.479** | ND | ND |
| **Other SVOCs** | mg/kg | | | | | | | | | |
| Acetophenone | | 98-86-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| Aniline | | 62-53-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Atrazine | | 1912-24-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Azobenzene | | 103-33-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzaldehyde | | 100-52-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzidine | | 92-87-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzoic acid | | 65-85-0 | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzyl alcohol | | 100-51-6 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 1,1-Biphenyl | | 92-52-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Bis(chloroisopropyl)ether | | 108-60-1 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Bis(2-chloroethyl)ether | | 111-44-4 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 UJ | 0.33 U |
| Bis(2-chloroethoxy)methane | | 111-91-1 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Bis(2-ethylhexyl)phthalate | | 117-81-7 | 340 U | 33 U | **0.1 J** | 0.61 U | **1.4 J** | **0.96 J** | 0.3 UJ | 0.33 UJ |
| 4-Bromophenyl phenyl ether | | 101-55-3 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Butyl benzyl phthalate | | 85-68-7 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 UJ | 0.3 UJ | 0.3 U | 0.33 UJ |
| Caprolactam | | 105-60-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| Carbazole | | 86-74-8 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4-Chloro-3-methylphenol | | 59-50-7 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4-Chloroaniline | | 106-47-8 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Chloronaphthalene | | 91-58-7 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Chlorophenol | | 95-57-8 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4-Chlorophenyl phenyl ether | | 7005-72-3 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Dibenzofuran | | 132-64-9 | **39 J** | **15 J** | 0.29 U | 0.61 U | **0.093 J** | 0.3 U | 0.3 U | 0.33 U |
| 1,2-Dichlorobenzene | | 95-50-1 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 1,3-Dichlorobenzene | | 541-73-1 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 1,4-Dichlorobenzene | | 106-46-7 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 3,3-Dichlorobenzidine | | 91-94-1 | 420 U | 40 U | 0.35 U | 0.75 U | 0.38 UJ | 0.37 UJ | 0.37 UJ | 0.4 UJ |
| 2,4-Dichlorophenol | | 120-83-2 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Diethyl phthalate | | 84-66-2 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Dimethyl phthalate | | 131-11-3 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2,4-Dimethylphenol | | 105-67-9 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Di-n-butyl phthalate | | 84-74-2 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4,6-Dinitro-2-methylphenol | | 534-52-1 | 2200 U | 210 U | 1.8 U | 3.8 UJ | 1.9 UJ | 1.9 UJ | 1.9 UJ | 2.1 UJ |
| 2,4-Dinitrophenol | | 51-28-5 | 2200 U | 210 U | 1.8 U | 3.8 U | 1.9 UJ | 1.9 UJ | 1.9 UJ | 2.1 UJ |
| 2,4-Dinitrotoluene | | 121-14-2 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2,6-Dinitrotoluene | | 606-20-2 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 1,4-Dioxane | | 123-91-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Di-n-octyl phthalate | | 117-84-0 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Fluorobiphenyl | | 321-60-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-Fluorophenol | | 367-12-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Hexachlorobutadiene | | 87-68-3 | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | | Location Name | GPEC-SB112 | GPEC-SB112 | GPEC-SB112 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB114 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Sample Name | GPEC-SB-112(53-54) | GPEC-SB-112(78-79) | GPEC-SB112(112-114) | GPEC-SB113(62-63) | GPEC-SB113(120-121) | GPEC-XX-071910 | GPEC-SB113(130-132) | GPEC-SB-114(110-111) |
| | | | Start Depth | 53 | 78 | 112 | 62 | 120 | | 130 | 110 |
| | | | End Depth | 54 | 79 | 114 | 63 | 121 | | 132 | 110 |
| | | | Depth Unit | ft | ft | ft | ft | ft | | ft | ft |
| | | | Sample Date | 7/6/2010 | 7/7/2010 | 7/12/2010 | 7/14/2010 | 7/19/2010 | 7/19/2010 | 7/19/2010 | 7/22/2010 |
| | | | Parent Sample Code | | | | | | GPEC-SB113(120-121) | | |
| Analyte | Units | CAS No. | | | | | | | | | |
| Hexachlorocyclopentadiene | | 77-47-4 | | 850 U | 82 U | 0.71 U | 1.5 UJ | 0.77 U | 0.75 U | 0.75 U | 0.81 U |
| Hexachloroethane | | 67-72-1 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Isophorone | | 78-59-1 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Methylphenol | | 95-48-7 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4-Methylphenol (p-Cresol) | | 106-44-5 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Nitroaniline | | 88-74-4 | | 850 U | 82 U | 0.71 U | 1.5 U | 0.77 U | 0.75 U | 0.75 U | 0.81 U |
| 3-Nitroaniline | | 99-09-2 | | 850 U | 82 U | 0.71 U | 1.5 U | 0.77 U | 0.75 U | 0.75 U | 0.81 U |
| 4-Nitroaniline | | 100-01-6 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 UJ | 0.3 UJ | 0.3 UJ | 0.33 UJ |
| Nitrobenzene | | 98-95-3 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2-Nitrophenol | | 88-75-5 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 4-Nitrophenol | | 100-02-7 | | 2200 U | 210 U | 1.8 U | 3.8 U | 1.9 U | 1.9 U | 1.9 U | 2.1 U |
| N-Nitrosodimethylamine | | 62-75-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-Nitrosodi-n-propylamine | | 621-64-7 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| N-Nitrosodiphenylamine | | 86-30-6 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Pentachlorophenol | | 87-86-5 | | 850 U | 82 U | 0.71 U | 1.5 U | 0.77 U | 0.75 U | 0.75 U | 0.81 U |
| Phenol | | 108-95-2 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Pyridine | | 110-86-1 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-Tribromophenol | | 118-79-6 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4,5-Tetrachlorobenzene | | 95-94-3 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6-Tetrachlorophenol | | 58-90-2 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | | 120-82-1 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| 2,4,5-Trichlorophenol | | 95-95-4 | | 2200 U | 210 U | 1.8 U | 3.8 U | 1.9 U | 1.9 U | 1.9 U | 2.1 U |
| 2,4,6-Trichlorophenol | | 88-06-2 | | 340 U | 33 U | 0.29 U | 0.61 U | 0.31 U | 0.3 U | 0.3 U | 0.33 U |
| Total SVOCs | | TSVOC | | **7026** | **1796.8** | **0.291** | **31.01** | **11.846** | **7.439** | ND | ND |
| **PCBS** | mg/kg | | | | | | | | | | |
| Aroclor 1016 | | 12674-11-2 | | 0.022 U | 0.021 U | 0.018 U | 0.02 UJ | R | 0.019 UJ | 0.019 U | 0.021 U |
| Aroclor 1221 | | 11104-28-2 | | 0.022 U | 0.021 U | 0.018 U | 0.02 U | R | 0.019 UJ | 0.019 U | 0.021 U |
| Aroclor 1232 | | 11141-16-5 | | 0.022 U | 0.021 U | 0.018 U | 0.02 U | R | 0.019 UJ | 0.019 U | 0.021 U |
| Aroclor 1242 | | 53469-21-9 | | 0.022 U | 0.021 U | 0.018 U | 0.02 U | R | 0.019 UJ | 0.019 U | 0.021 U |
| Aroclor 1248 | | 12672-29-6 | | 0.022 U | 0.021 U | 0.018 U | 0.02 U | **0.014 J** | **0.026 J** | 0.019 U | 0.021 U |
| Aroclor 1254 | | 11097-69-1 | | 0.022 U | 0.021 U | 0.018 U | 0.02 U | **0.011 J** | **0.03 J** | 0.019 U | 0.021 U |
| Aroclor 1260 | | 11096-82-5 | | 0.022 U | 0.021 U | 0.018 U | 0.02 UJ | R | **0.009 J** | 0.019 U | 0.021 U |
| Aroclor 1262 | | 37324-23-5 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor 1268 | | 11100-14-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total PCBs | | 1336-36-3 | | ND | ND | ND | ND | **0.025** | **0.065** | ND | ND |
| **Dioxins and Furans** | pg/g | | | | | | | | | | |
| Total Heptachlorodibenzofuran | | 38998-75-3 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDD | | 35822-46-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,6,7,8-HpCDF | | 67562-39-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8,9-HpCDF | | 55673-89-7 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Heptachlorodibenzo-p-dioxin | | 37871-00-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total HxCDF | | 55684-94-1 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzofuran | | 57117-44-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzofuran | | 72918-21-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Hexachlorodibenzo-p-dioxin | | 34465-46-8 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDF | | 70648-26-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,4,7,8-HxCDD | | 39227-28-6 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin | | 57653-85-7 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin | | 19408-74-3 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,6,7,8-HxCDF | | 60851-34-5 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzofuran | | 39001-02-0 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Octachlorodibenzo-p-dioxin | | 3268-87-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlorodibenzofuran | | 30402-15-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,3,4,7,8-PeCDF | | 57117-31-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Pentachlororodibenzo-p-dioxin | | 36088-22-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDD | | 40321-76-4 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3,7,8-PeCDF | | 57117-41-6 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzofuran | | 55722-27-5 | | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Tetrachlorodibenzo-p-dioxin | | 41903-57-5 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzofuran | | 51207-31-9 | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin | | 1746-01-6 | | NA | NA | NA | NA | NA | NA | NA | NA |
| **Pesticides** | mg/kg | | | | | | | | | | |
| Aldrin | | 309-00-2 | | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | | NA | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, New York**

| | | Location Name | GPEC-SB112 | GPEC-SB112 | GPEC-SB112 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB114 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-112(53-54) | GPEC-SB-112(78-79) | GPEC-SB112(112-114) | GPEC-SB113(62-63) | GPEC-SB113(120-121) | GPEC-XX-071910 | GPEC-SB113(130-132) | GPEC-SB-114(110-111) |
| | | Start Depth | 53 | 78 | 112 | 62 | 120 | | 130 | 110 |
| | | End Depth | 54 | 79 | 114 | 63 | 121 | | 132 | 110 |
| | | Depth Unit | ft | ft | ft | ft | ft | | ft | ft |
| | | Sample Date | 7/6/2010 | 7/7/2010 | 7/12/2010 | 7/14/2010 | 7/19/2010 | 7/19/2010 | 7/19/2010 | 7/22/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB113(120-121) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Chlordane | | 57-74-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Pesticides | | TPEST | NA | NA | NA | NA | NA | NA | NA | NA |
| **OC Pesticides** | mg/kg | | | | | | | | | |
| Aldrin | | 309-00-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-bhc | | 319-84-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| beta-BHC | | 319-85-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| alpha-chlordane | | 5103-71-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-Chlordane | | 5103-74-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| oxy-Chlordane | | 27304-13-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4-DDD | | 72-54-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDE | | 3424-82-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | 72-55-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| o,p'-DDT | | 789-02-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | 50-29-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| delta-BHC | | 319-86-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dieldrin | | 60-57-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan I | | 959-98-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan II | | 33213-65-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endosulfan sulfate | | 1031-07-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin | | 72-20-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin aldehyde | | 7421-93-4 | NA | NA | NA | NA | NA | NA | NA | NA |
| Endrin ketone | | 53494-70-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| gamma-BHC | | 58-89-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor | | 76-44-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Heptachlor epoxide | | 1024-57-3 | NA | NA | NA | NA | NA | NA | NA | NA |
| Hexachlorobenzene | | 118-74-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methoxychlor | | 72-43-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Mirex | | 2385-85-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Mitotane | | 53-19-0 | NA | NA | NA | NA | NA | NA | NA | NA |
| cis-Nonachlor | | 5103-73-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| trans-Nonachlor | | 39765-80-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| Toxaphene | | 8001-35-2 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total OC Pesticides | | NE | NA | NA | NA | NA | NA | NA | NA | NA |
| **Herbicides** | mg/kg | | | | | | | | | |
| MCPP | | 7085-19-0 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-D | | 94-75-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DB | | 94-82-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dicamba | | 1918-00-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Dichloroprop | | 120-36-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-Dichloropropionic acid | | 75-99-0 | NA | NA | NA | NA | NA | NA | NA | NA |

| | | Location Name | GPEC-SB112 | GPEC-SB112 | GPEC-SB112 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB113 | GPEC-SB114 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Sample Name | GPEC-SB-112(53-54) | GPEC-SB-112(78-79) | GPEC-SB112(112-114) | GPEC-SB113(62-63) | GPEC-SB113(120-121) | GPEC-XX-071910 | GPEC-SB113(130-132) | GPEC-SB-114(110-111) |
| | | Start Depth | 53 | 78 | 112 | 62 | 120 | | 130 | 110 |
| | | End Depth | 54 | 79 | 114 | 63 | 121 | | 132 | 110 |
| | | Depth Unit | ft | ft | ft | ft | ft | | ft | ft |
| | | Sample Date | 7/6/2010 | 7/7/2010 | 7/12/2010 | 7/14/2010 | 7/19/2010 | 7/19/2010 | 7/19/2010 | 7/22/2010 |
| | | Parent Sample Code | | | | | | GPEC-SB113(120-121) | | |
| Analyte | Units | CAS No. | | | | | | | | |
| Dinoseb | | 88-85-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Methylchlorophenoxyacetic acid | | 94-74-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| Silvex | | 93-72-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-Trichlorophenoxyacetic Acid | | 93-76-5 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | mg/kg | | | | | | | | | |
| Methyl mercury | | 22967-92-6 | NA | NA | NA | NA | NA | NA | NA | NA |
| **Total Metals** | mg/kg | | | | | | | | | |
| Aluminum | | 7429-90-5 | **2670** | **4510** | **9540** | **2950** | **1320** | **1330** | **2020** | **4450** |
| Antimony | | 7440-36-0 | 5.1 U | 5.1 U | 4.4 U | 4.6 U | 4.6 U | 4.5 U | 4.6 U | 4.9 UJ |
| Arsenic | | 7440-38-2 | 6.4 UJ | 6.4 UJ | 5.6 UJ | **2.5 J** | **1.9 J** | 5.7 U | 5.8 U | **5.3 J** |
| Barium | | 7440-39-3 | **12** | **18.4** | **471** | **28 J** | **9.6 J** | **7.4 J** | **12 J** | **16 J** |
| Beryllium | | 7440-41-7 | **0.082 J** | **0.14 J** | **0.28 J** | **0.13 J** | 1.4 U | 1.4 U | **0.074 J** | **0.37 J** |
| Cadmium | | 7440-43-9 | 1.5 U | 1.5 U | 1.3 U | 1.4 U | **0.7 J** | **0.46 J** | 1.4 U | **0.54 J** |
| Calcium | | 7440-70-2 | **13600** | **9710** | **15300** | **12500** | **19700 J** | **4360 J** | **4140** | **1770** |
| Chromium | | 7440-47-3 | **6.2** | **9.9** | **34.1** | **7.3 J** | **13.5 J** | **9.6 J** | **13.6 J** | **10.5 J** |
| Chromium (III) | | 16065-83-1 | NA | NA | NA | NA | NA | NA | NA | NA |
| Chromium (VI) | | 18540-29-9 | 2.5 U | 2.5 U | 2.1 U | 2.3 U | 2.3 U | 2.3 U | **4.7** | 2.4 U |
| Cobalt | | 7440-48-4 | **2.4** | **3.2** | **5.2** | **3** | **1.3 J** | **1.3 J** | **1.8** | **6.2** |
| Copper | | 7440-50-8 | **6.9** | **10.6** | **27.7** | **11.8** | **75.3** | **46.4** | **5.8** | **7 J** |
| Iron | | 7439-89-6 | **6330** | **9630** | **20800** | **7760** | **4160** | **4300** | **6140** | **69000** |
| Lead | | 7439-92-1 | **1.1 J** | **1 J** | **5** | 4.2 U | **10** | **6.1** | 4.1 U | **3.4 J** |
| Magnesium | | 7439-95-4 | **6510** | **5360** | **3060** | **6830** | **9610 J** | **2150 J** | **2110** | **2700** |
| Manganese | | 7439-96-5 | **159** | **231** | **526** | **155** | **263 J** | **90.2 J** | **95.9** | **1080** |
| Mercury | | 7439-97-6 | 0.057 UJ | 0.059 UJ | 0.051 UJ | **0.054** | **0.048** | **0.028** | 0.052 U | **0.0079 J** |
| Nickel | | 7440-02-0 | **6.1** | **9.3** | **11.9** | **7.1** | **19.5** | **13.4** | **5.6** | **8.7** |
| Potassium | | 7440-09-7 | **673** | **2170** | **1850** | **634** | **316** | **249** | **362** | **1160** |
| Selenium | | 7782-49-2 | 11.5 U | 11.5 U | 10 U | 10.5 UJ | 10.4 UJ | 10.2 UJ | 10.4 UJ | 11.2 UJ |
| Silver | | 7440-22-4 | 1.5 U | 1.5 U | **1.3** | **0.22 J** | **0.36 J** | **0.28 J** | **0.17 J** | **1 J** |
| Sodium | | 7440-23-5 | **392** | **887** | **1600** | **1030** | **502** | **418** | **459** | **456** |
| Thallium | | 7440-28-0 | 4.6 U | 4.6 U | 4 U | 4.2 U | 4.2 U | 4.1 U | 4.1 U | 4.5 UJ |
| Tin | | 7440-31-5 | | | | | | | | |
| Vanadium | | 7440-62-2 | **10.1** | **25.2** | **29.9** | **12.1 J** | **5.4 J** | **4.6 J** | **7.1 J** | **14.1 J** |
| Zinc | | 7440-66-6 | **13.1** | **15.7** | **19.3** | **14.5 J** | **59.1 J** | **39.5 J** | **8.8 J** | **30.5 J** |
| **Cyanides** | mg/kg | | | | | | | | | |
| Free Cyanide | | FREECN | 0.26 U | 0.25 U | 0.21 U | 0.23 U | 0.23 U | 0.22 U | 0.22 U | 0.24 U |
| Total Cyanide | | 57-12-5 | NA | NA | NA | R | 0.574 UJ | 0.56 UJ | 0.558 UJ | NA |
| **Other** | mg/kg | | | | | | | | | |
| Ammonia | | 7664-41-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| Black Carbon | | BC | NA | NA | NA | NA | NA | NA | NA | NA |
| Nitrate and Nitrite as N | | NO2/NO3 | NA | NA | NA | NA | NA | NA | NA | NA |
| pH (s.u.) | | pH | NA | NA | NA | NA | NA | NA | NA | NA |
| Sulfide | | 18496-25-8 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Kjeldahl Nitrogen | | TKN | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Nitrogen | | 7727-37-9 | NA | NA | NA | NA | NA | NA | NA | NA |
| Total Organic Carbon | | TOC | **14200** | **13300** | **2220** | **7620** | **4680** | **4480** | **2590** | **7590** |
| Total Phosphorous | | 7723-14-0 | NA | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
mg/kg - milligrams/kilogram or parts per million (ppm)
pg/g - picogram/gram
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
PCBs - polychlorinated biphenyls
Total BTEX, Total VOCs, Total PAHs, Total SVOCs, Total PCBs and Total Pesticides are calculated using detects only.

NE - not established
Bolding indicates a detected result value

*: Sediment results are being addressed as part of the CERCLA project.

**Validation Qualifiers:**
J - estimated value
JN - analyte is presumptively present at an approximated quantity
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated
R - rejected

**Table 21. Sediment Sample Results**
**Remedial Investigation Report**
**Greenpoint Energy Center Site**
**Greenpoint, NY**

**Notes:**

mg/kg - milligrams/kilogram or parts per million (ppm)
pg/g - picogram/gram
BTEX - benzene, toluene, ethylbenzene, and xylenes
VOCs - volatile organic compounds
PAHs - polycyclic aromatic hydrocarbons
SVOCs - semivolatile organic compounds
PCBs - polychlorinated biphenyls
Total BTEX, Total VOCs, Total PAHs, Total SVOCs, Total PCBs and Total Pesticides are calculated using detects only.

NE - not established
Bolding indicates a detected result value

*: Sediment results are being addressed as part of the CERCLA project.

**Validation Qualifiers:**

J - estimated value
JN - analyte is presumptively present at an approximated quantity
U - indicates not detected to the reporting limit
UJ - not detected at or above the reporting limit shown and the reporting limit is estimated
R - rejected

# Figures

**Figure 1 Site Location Map**

**Figure 2 Investigation Phase and Area Boundaries**

**Figure 3 Current Features and Site Boundaries**

**Figure 4 Surrounding Land Use Map**

**Figure 5 Pre-MGP Era Facilities**

**Figure 6 PRP Locations**

**Figure 7 Generalized Profile of Soil Conditions**

**Figure 8 IRM and Remedial Excavation Locations**

**Figure 9 Pre-Design Investigation Locations**

**Figure 10 Phase 1 Sample Locations**

**Figure 11 Phase 2 Sample Locations**

**Figure 12 Phase 3 Sample Locations**

**Figure 13 Monitoring and Recovery Well and Piezometer Location Map**

**Figure 14 SVI Sample Locations**

**Figure 15 Subsurface Profile A**

**Figure 16 Subsurface Profile B**

**Figure 17 Subsurface Profile C**

**Figure 18 Subsurface Profile D**

**Figure 19 Marsh Deposits Locations**

**Figure 20 Groundwater Table Elevation Contours 2012**

**Figure 21 Intermediate Zone Groundwater Elevation Contours 2012**

**Figure 22 Deep Zone Groundwater Elevation Contours 2012**

**Figure 23 Groundwater Table Elevation Contours 2015**

**Figure 24 Intermediate Zone Groundwater Elevation Contours 2015**

**Figure 25 Deep Zone Groundwater Elevation Contours 2015**

**Figure 26 Groundwater Table Elevation Contours 2017**

**Figure 27 Intermediate Zone Groundwater Elevation Contours 2017**

**Figure 28 Deep Zone Groundwater Elevation Contours 2017**

**Figure 29 Groundwater Table Elevation Contours 2024**

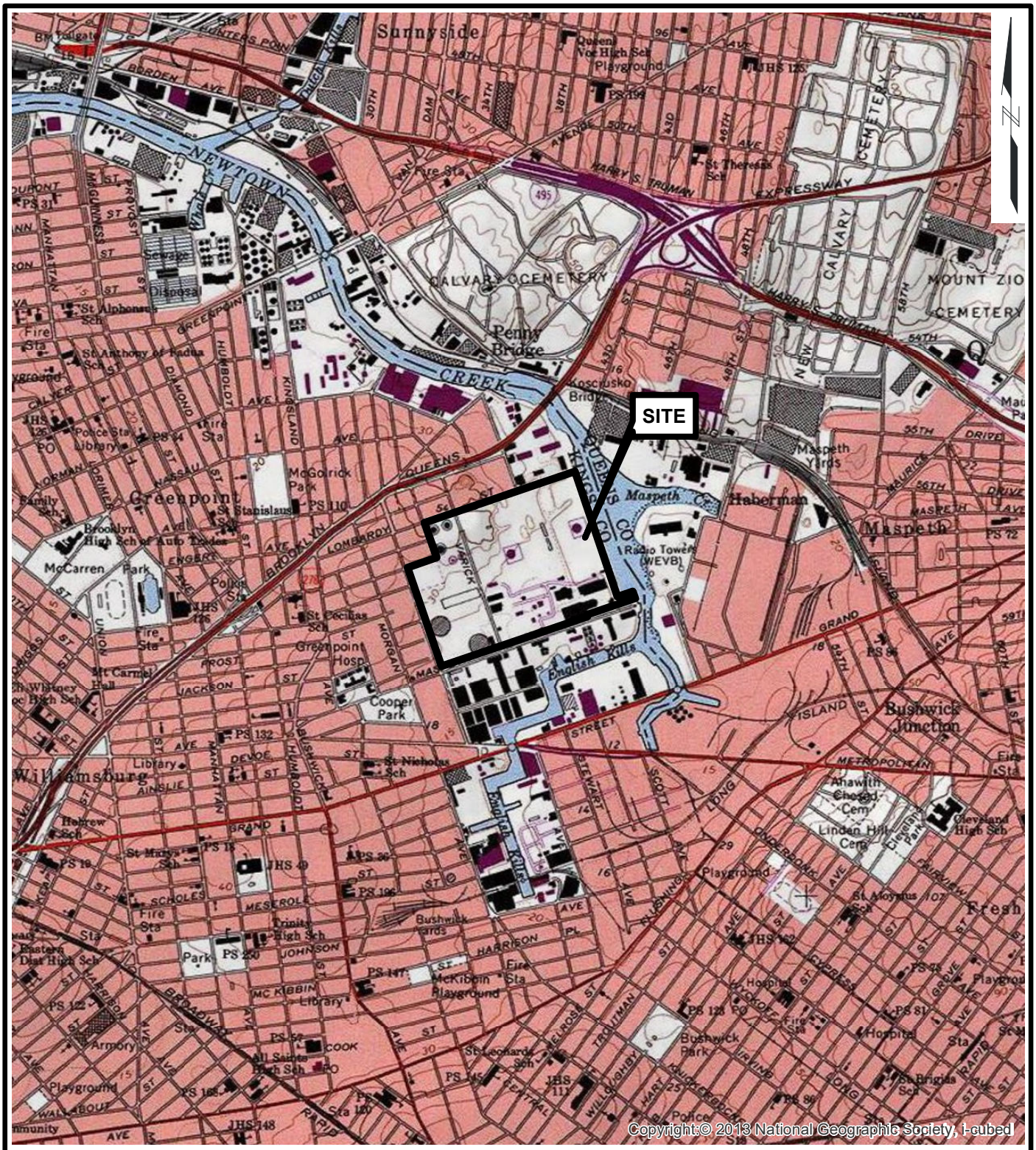
**Figure 30 Intermediate Zone Groundwater Elevation Contours 2024**

**Figure 31 Deep Zone Groundwater Elevation Contours 2024**

**Figure 32 Soil PCB Exceedances of the UUSCOs**

**Figure 33 Groundwater PCB Analytical Summary**

**Figure 34 DNAPL Thickness Rebound Graphs**




***SOURCE:***
USGS TOPOGRAPHIC MAP ACCESSED
VIA ARCGIS ONLINE SERVICES.

0 2,000 4,000

SCALE: 1" =2000'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

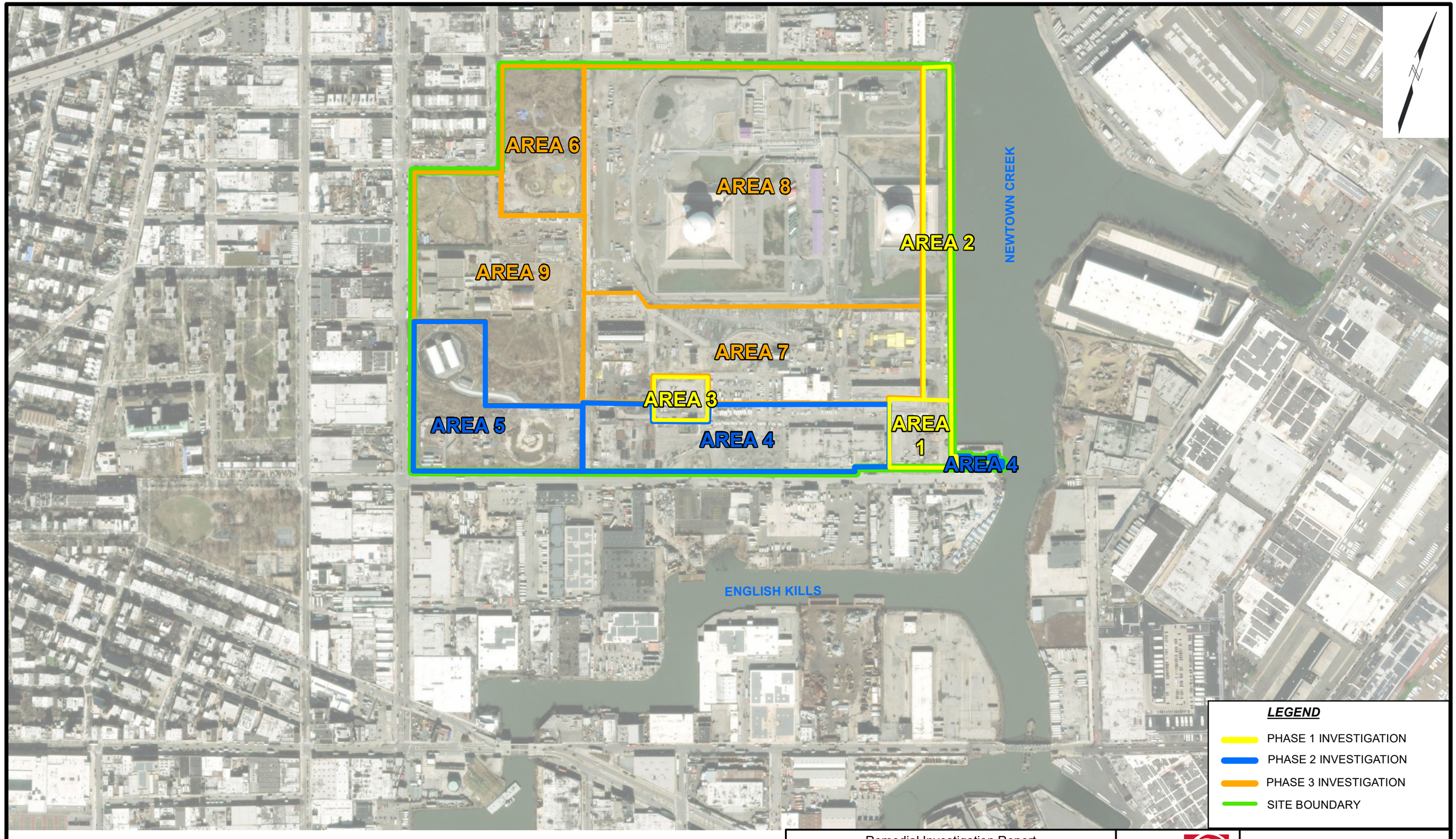
nationalgrid

GEI Consultants

**SITE LOCATION MAP**

Project 125180 | June 2026 | Fig. 1

\\GTB1V-FS01\gis\Projects\National_Grid\Greenpoint\Phase_3_RI\Site Location Map.mxd




***SOURCES:***
1.AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 450 900
SCALE: 1" = 450'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

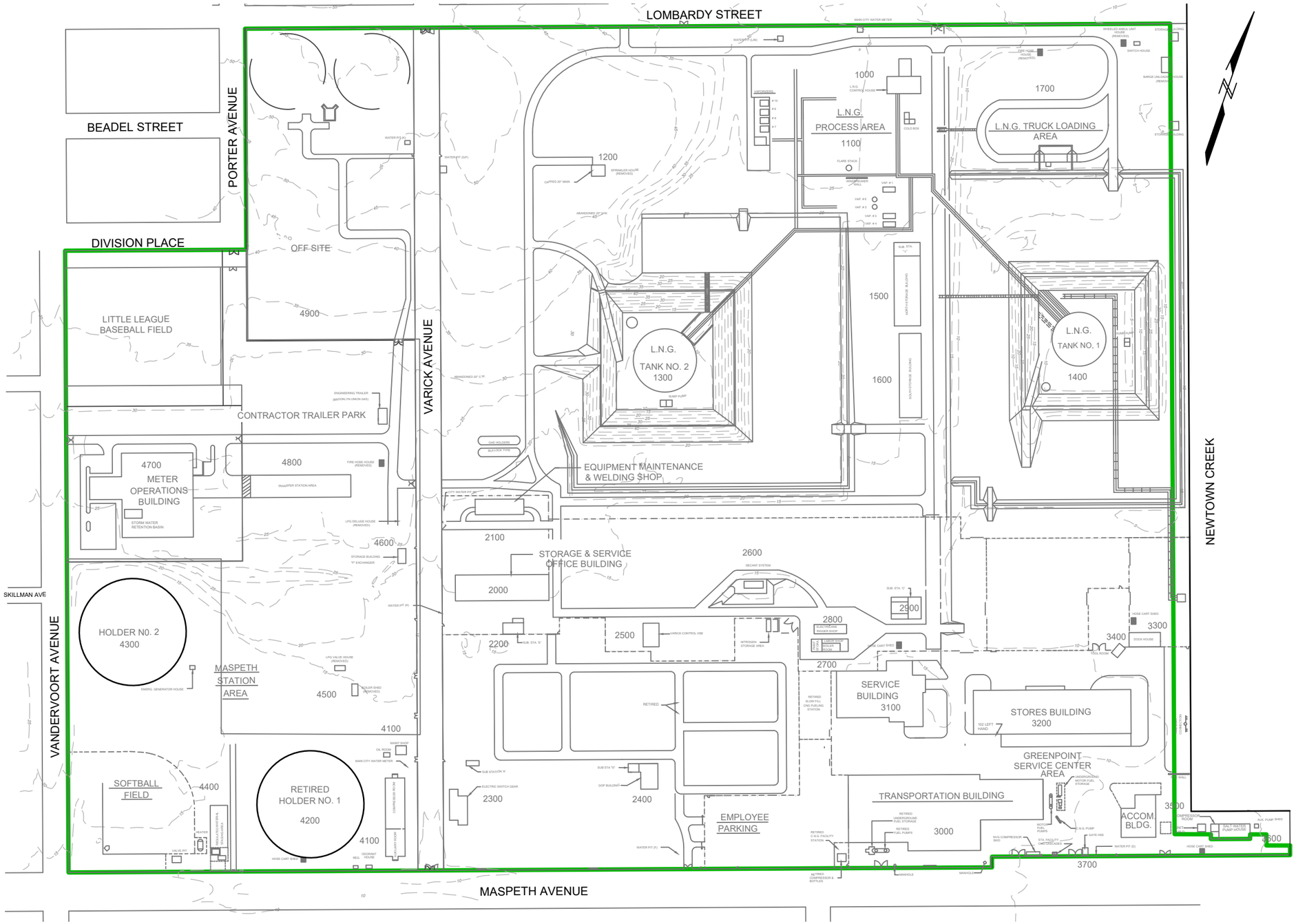
nationalgrid

GEI Consultants

INVESTIGATION PHASE AND AREA BOUNDARIES

Project 125180 | June 2026 | Fig. 2

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Investigation Phase and Area Boundaries_250409.mxd




**LEGEND:**

CURRENT BUILDING/STRUCTURE

APPROXIMATE SITE BOUNDARY

**SOURCES:**

1. SANBORN FIRE INSURANCE MAPS 1933, 1951, 1965, 1968, 1977.
2. 1954 AERIAL PHOTOGRAPH OBTAINED FROM ENVIRONMENTAL DATA RESOURCES, INC.
3. 2002 AERIAL PHOTOGRAPH OBTAINED FROM WWW.GLOBEXPORER.COM.
4. *DRAWING NO. 10 A 76 - GREENPOINT PLANT PROPERTY PLAN* PREPARED BY BROOKLYN UNION PROJECT/CONSTRUCTION ENGINEERING DEPT., SCALE 1"=80', DATED DEC. 21, 1989, REVISED 3/22/96.

0 250 500

SCALE: 1" = 250'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

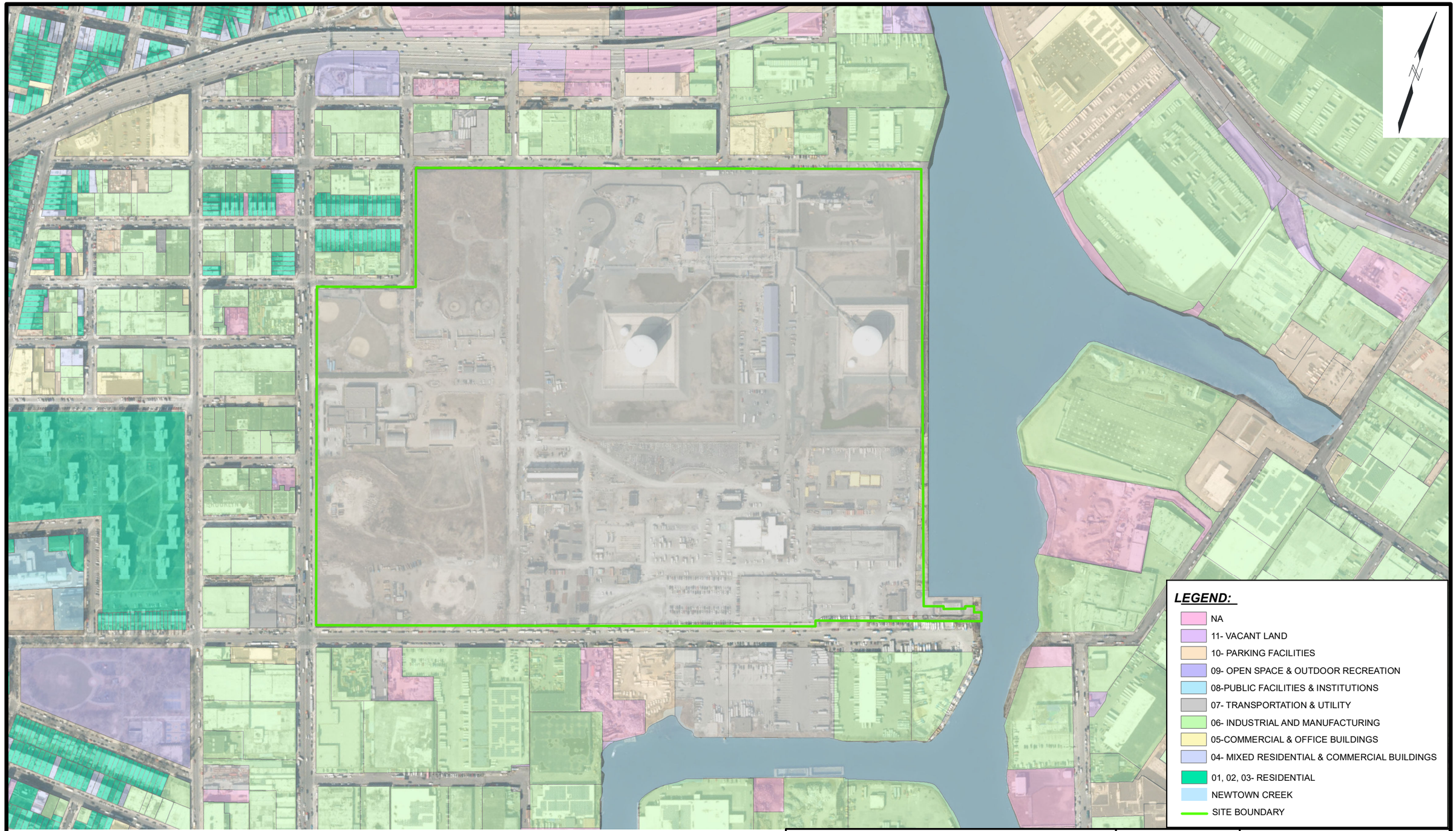
nationalgrid

GEI Consultants

CURRENT FEATURES AND SITE BOUNDARIES

Project 125180 | June 2026 | Fig. 3

---- B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\00_CAD\Figures\RIR\3_125180_RIR_FEAT.dwg - 3/21/2025




***SOURCES:***
1. AERIAL PHOTOGRAPH FROM ESRI WORLD IMAGERY
2. LAND USE LAST UPDATED: APRIL 8, 2025 FROM NYC DEPARTMENT OF CITY PLANNING.

0 400 800

SCALE: 1" = 400'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

# SURROUNDING LAND USE

Project 125180 | June 2026 | Fig. 4

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Surrounding Land Use_250409.mxd

DEMUTH GLASS MFG CO.

MACHINE SHOP

FURNACE

ENGINE

OIL TANK UNDERGROUND

NEWTOWN CREEK

GLUE STOCK STORAGE

OIL TANK STRUCTURES

GLUE STOCK STORAGE

GLUE PLANT

PACKING LAB

SKIN & BOILING ROOM

GLUE FACTORY

MACHINE SHOP

PUMP

MACHINE

TANKS

LIME VATS

AETNA VARNISH CO. INC.

GAS TANK

4 UNDERGROUND TURPENTINE TANKS

PETER COOPER GLUE MANUFACTORY

N

***LEGEND:***

- SITE BOUNDARY
- APPROXIMATE LOCATION OF HISTORIC STRUCTURES
- NEWTOWN CREEK

***SOURCES:***

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. HISTORIC STRUCTURE LOCATIONS ARE APPROXIMATE BASED ON 1907, AND 1933 CERTIFIED SANBORN MAPS.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

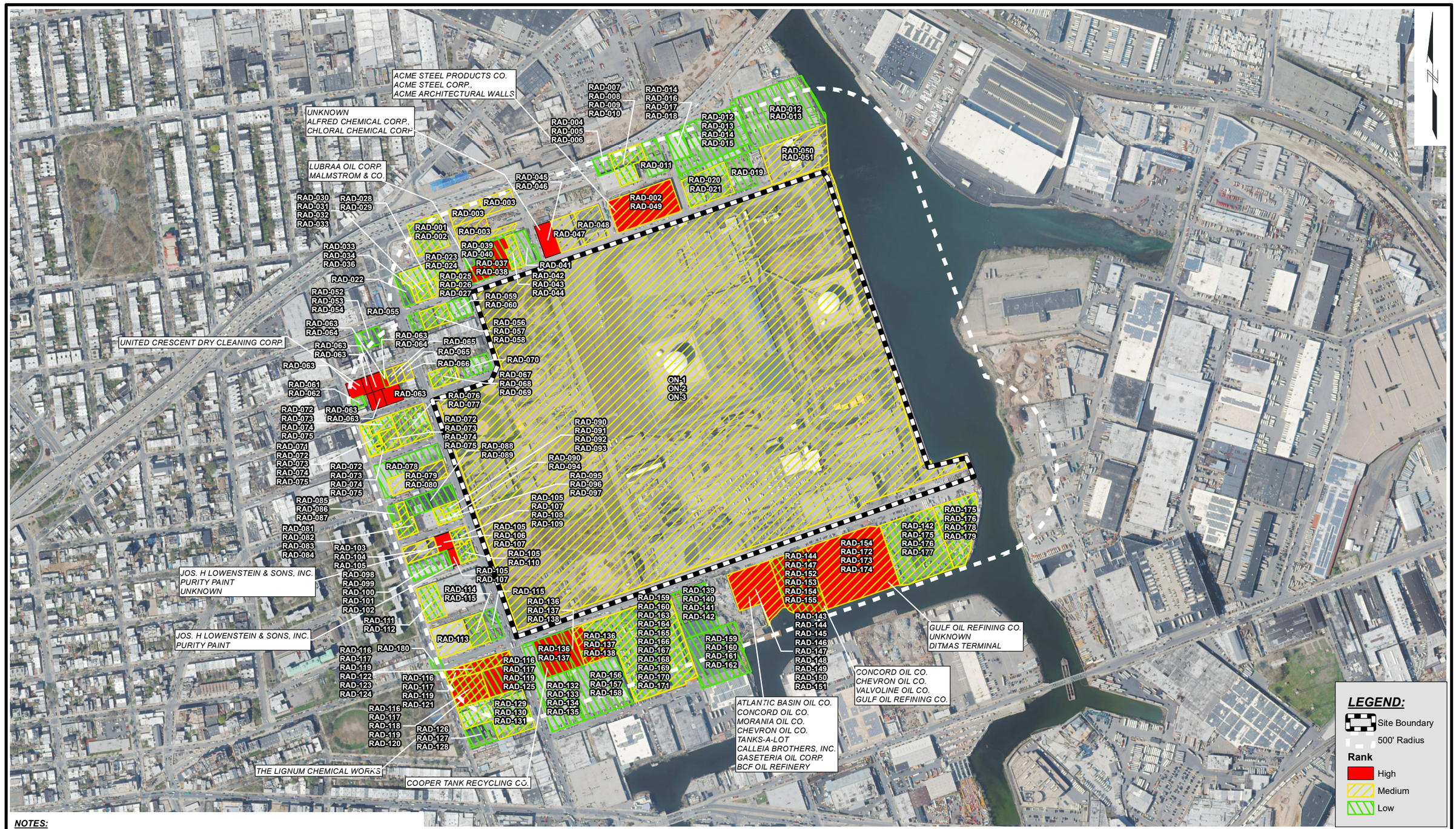
PRE-MGP ERA FACILITIES

Project 125180

June 2026

Fig. 5

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Pre MGP Facilities_250409.mxd




**NOTES:**
1.THE EQUITY MGP SITE WAS LOCATED WITHIN 500 FEET OF THE GREENPOINT MGP SITE.

**SOURCES:**
1. 2016 ESRI WORLD IMAGERY
2. NYC DEPARTMENT OF CITY PLANNING, MAPPLUTO, REV. JUNE 2015.
3. POTENTIALLY RESPONSIBLE PARTIES (PRPS) IDENTIFIED USING SANBORN MAPS, AND AVAILABLE DIGITAL AND PHYSICAL NEW YORK PUBLIC LIBRARY ATLASES AND MAPS. SEE APPENDED INFORMATION FOR THE SITE FOR MAPS AND ATLASES REVIEWED.

0 540 1,080

SCALE: 1" = 550'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

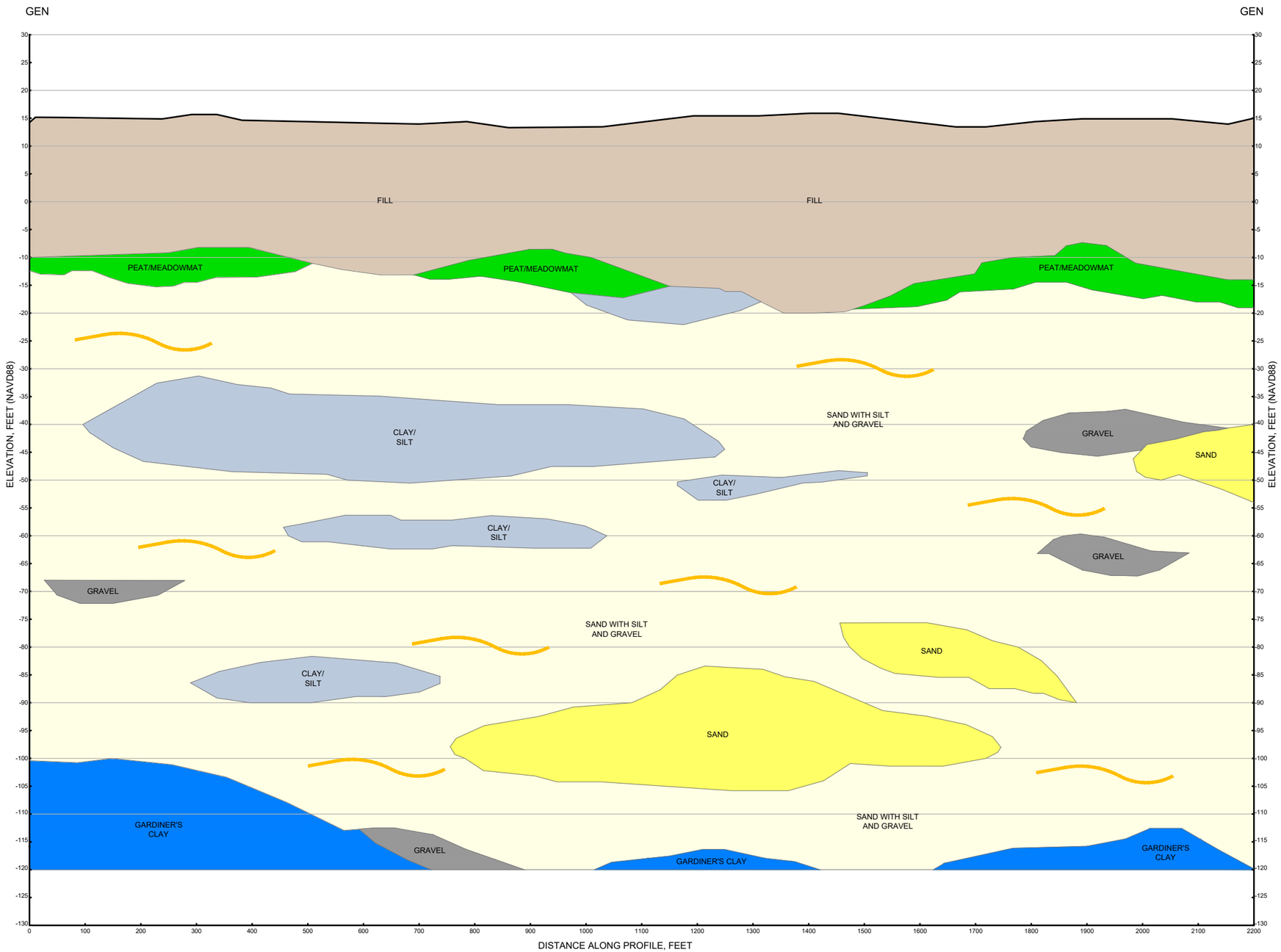
nationalgrid

GEI Consultants

PRP LOCATIONS

Project 125180 | June 2026 | Fig. 6

\\Gtb1v-fs01\GIS\Projects\National_Grid\Greenpoint\Phase_3_RI\Greenpoint_PRPs.mxd




## *STRATIGRAPHY*

- FILL
- SEDIMENTS
- CLAY/SILT
- SAND WITH SILT AND GRAVEL
- SAND
- WATER
- PEAT/MEADOW MAT
- GRAVEL
- GARDINER'S CLAY
- LENSES

NOT TO SCALE

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

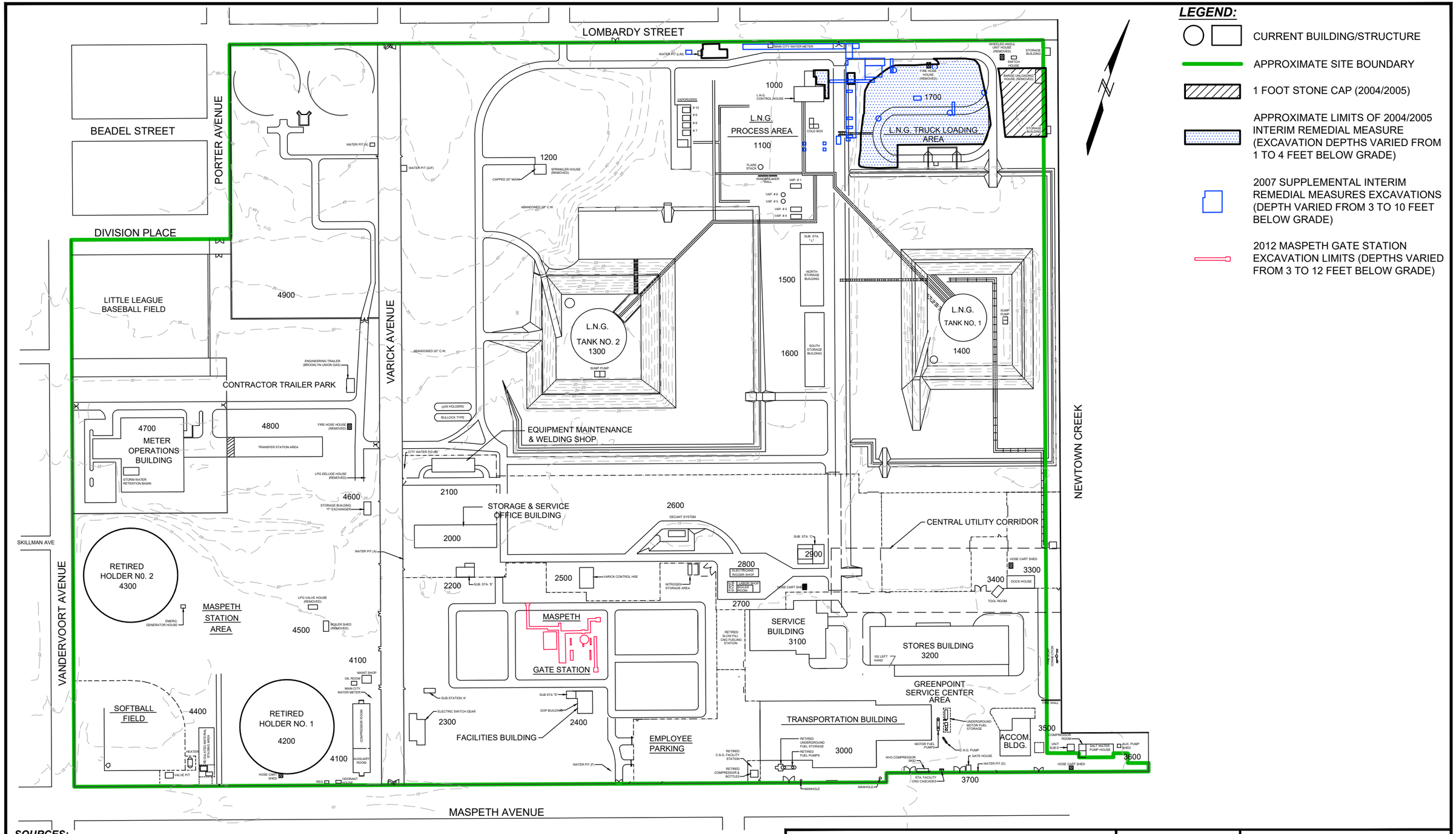
nationalgrid

GEI Consultants

GENERALIZED PROFILE OF SOIL CONDITIONS

Project 125180 | June 2026 | Fig. 7

\\gtb1v-fs01\ \\gtb1v-fs01\CAD\Project\National Grid\Greenpoint\RIR\7 125180-RIR-GPSC.dwg - 9/11/2019




**LEGEND:**

- CURRENT BUILDING/STRUCTURE
- APPROXIMATE SITE BOUNDARY
- 1 FOOT STONE CAP (2004/2005)
- APPROXIMATE LIMITS OF 2004/2005 INTERIM REMEDIAL MEASURE (EXCAVATION DEPTHS VARIED FROM 1 TO 4 FEET BELOW GRADE)
- 2007 SUPPLEMENTAL INTERIM REMEDIAL MEASURES EXCAVATIONS (DEPTH VARIED FROM 3 TO 10 FEET BELOW GRADE)
- 2012 MASPETH GATE STATION EXCAVATION LIMITS (DEPTHS VARIED FROM 3 TO 12 FEET BELOW GRADE)

**SOURCES:**

1. SANBORN FIRE INSURANCE MAPS 1933, 1951, 1965, 1968, 1977.
2. 1954 AERIAL PHOTOGRAPH OBTAINED FROM ENVIRONMENTAL DATA RESOURCES, INC.
3. 2002 AERIAL PHOTOGRAPH OBTAINED FROM WWW.GLOBEXPORER.COM.
4. *DRAWING NO. 10 A 76 - GREENPOINT PLANT PROPERTY PLAN* PREPARED BY BROOKLYN UNION PROJECT/CONSTRUCTION ENGINEERING DEPT., SCALE 1"=80', DATED DEC. 21, 1989, REVISED 3/22/96.

0 250 500

SCALE: 1" = 250'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

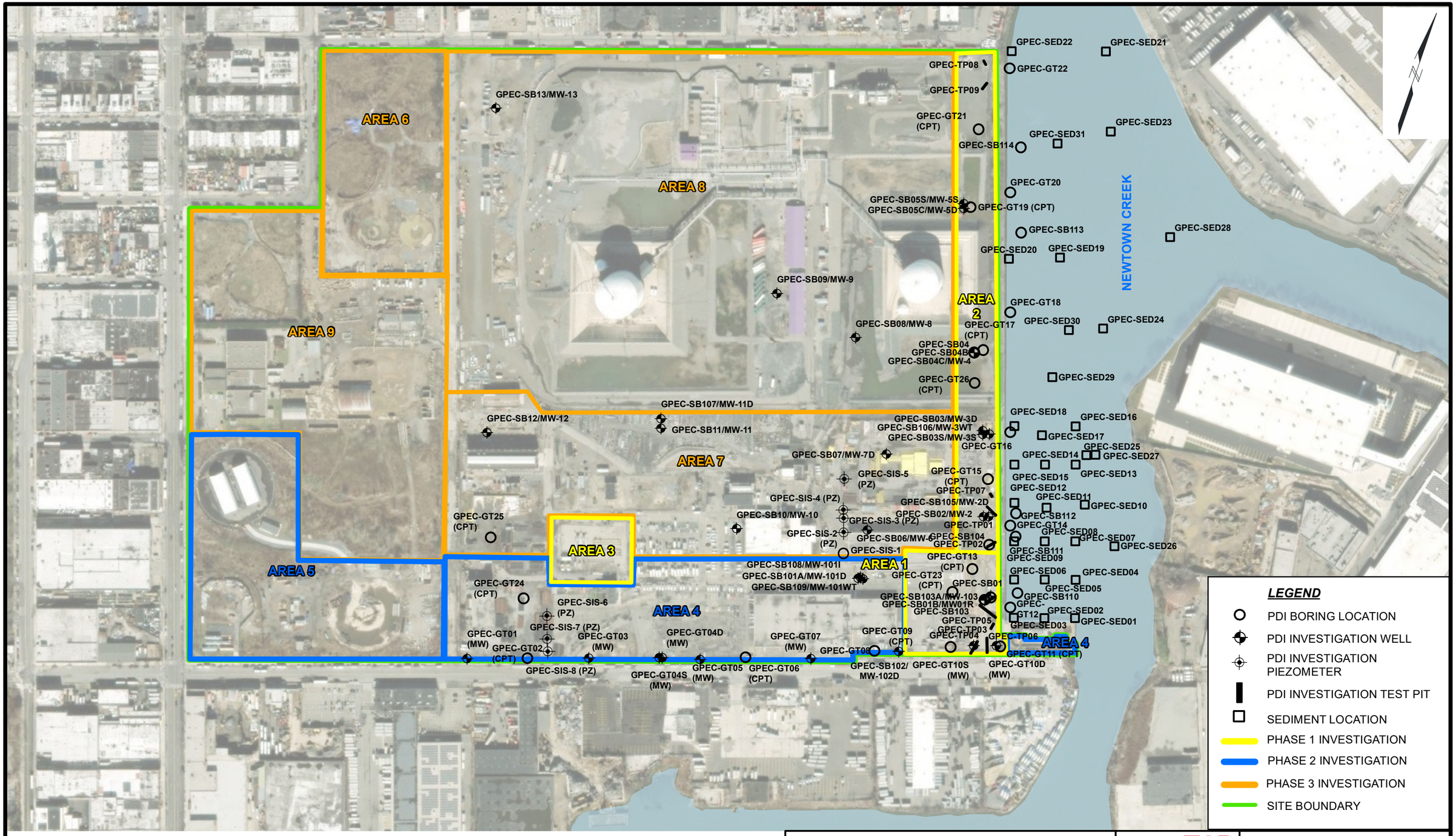
nationalgrid

GEI Consultants

IRM AND REMEDIAL EXCAVATION LOCATIONS

Project 125180 | June 2026 | Fig. 8

---- B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\00_CAD\Figures\RIR\8_125180_RIR_IRM.dwg - 4/7/2025




***SOURCES:***
1.AERIAL PHOTOGRAPH OBTAINED FROMESRI WORLD IMAGERY.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

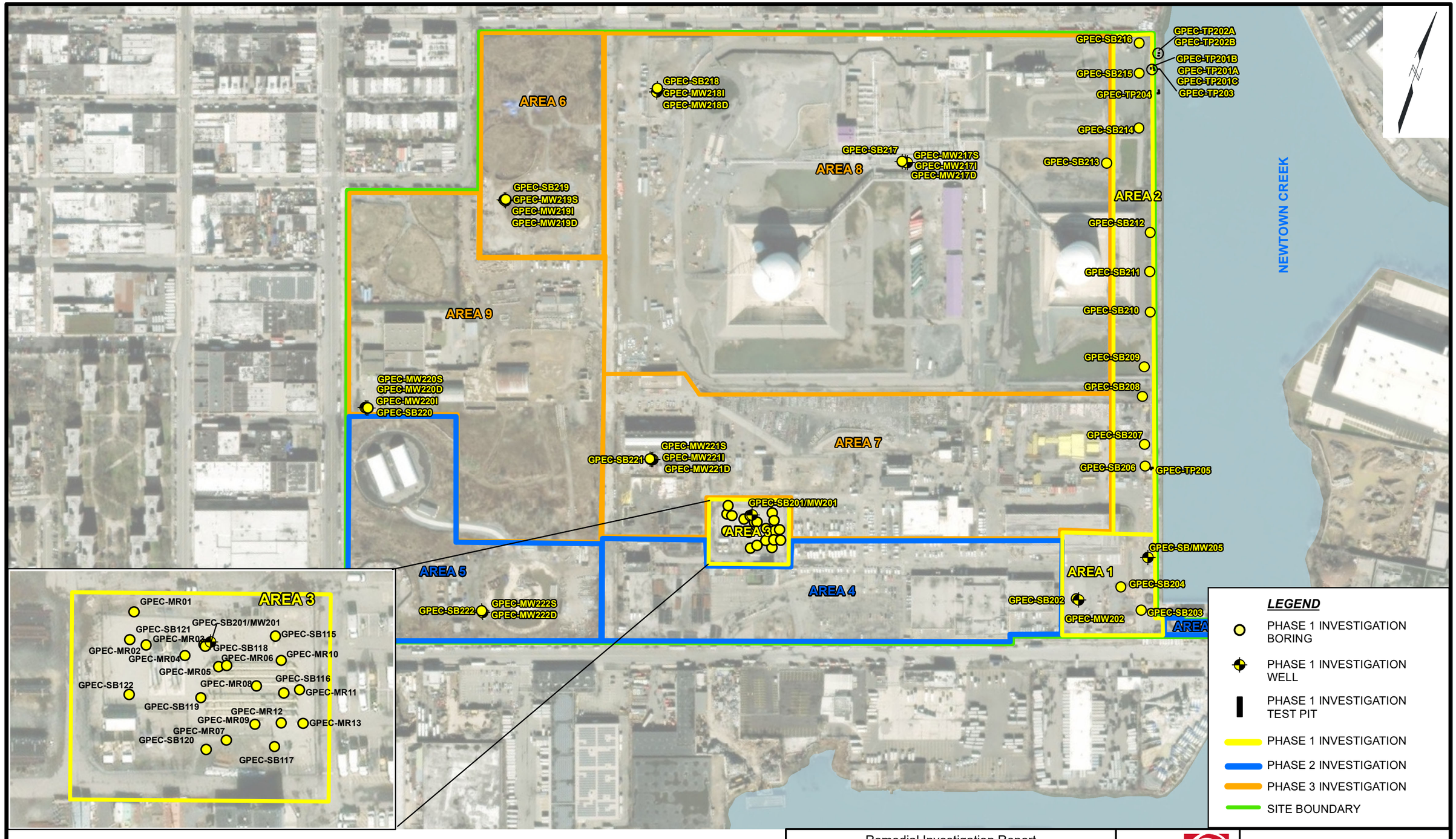
nationalgrid

GEI Consultants

PRE-DESIGN INVESTIGATION LOCATIONS

Project 125180 | June 2026 | Fig. 9

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\PreDesignSampleLocations_250409.mxd




***SOURCES:***

1.AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

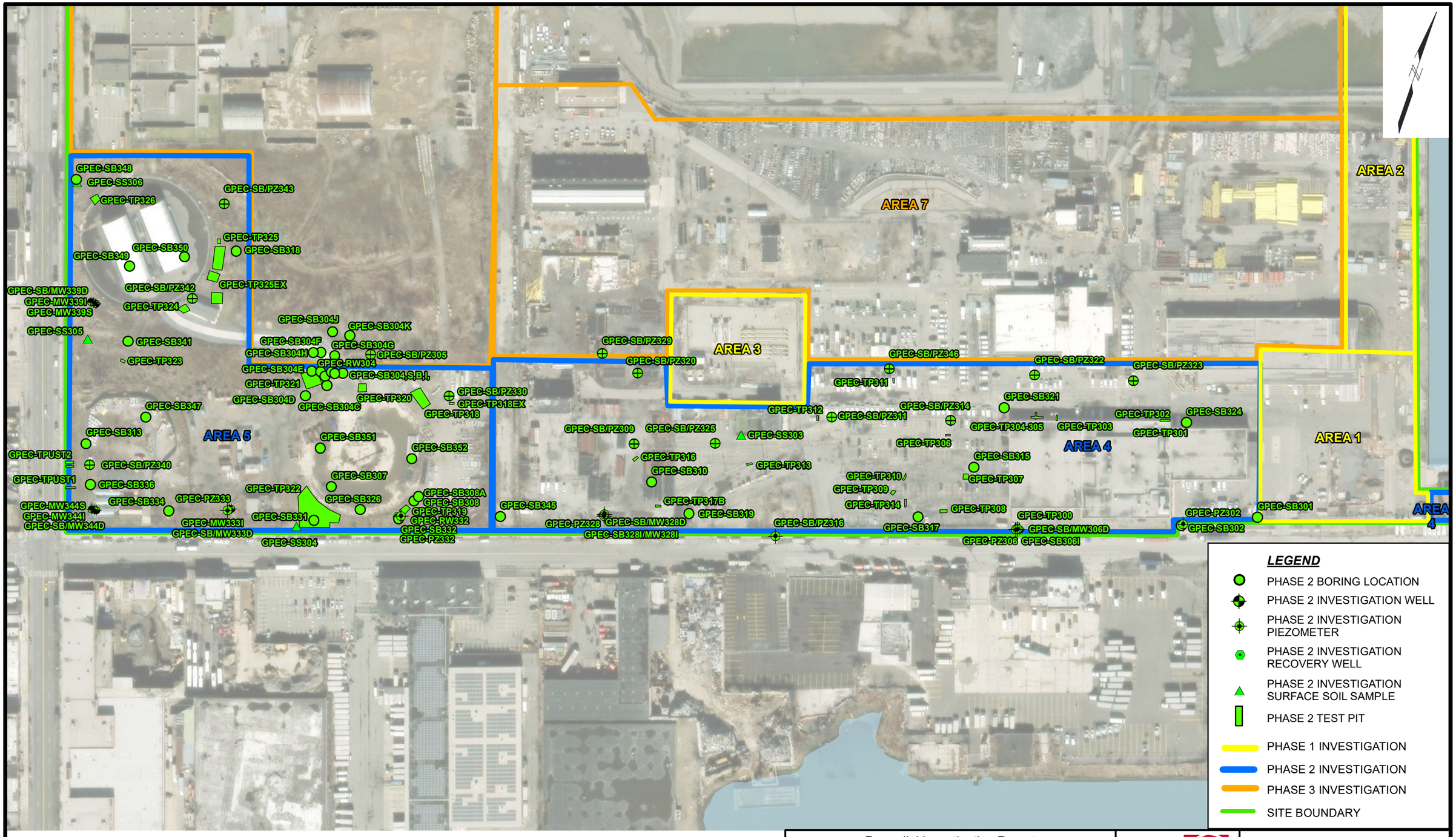
GEI Consultants

Project 125180

REMEDIAL INVESTIGATION
PHASE 1 SAMPLE
LOCATIONS

June 2026 Fig. 10

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Phase 1 Sample Locations_250409.mxd




***SOURCES:***
1.AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 180 360
SCALE: 1" = 180'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

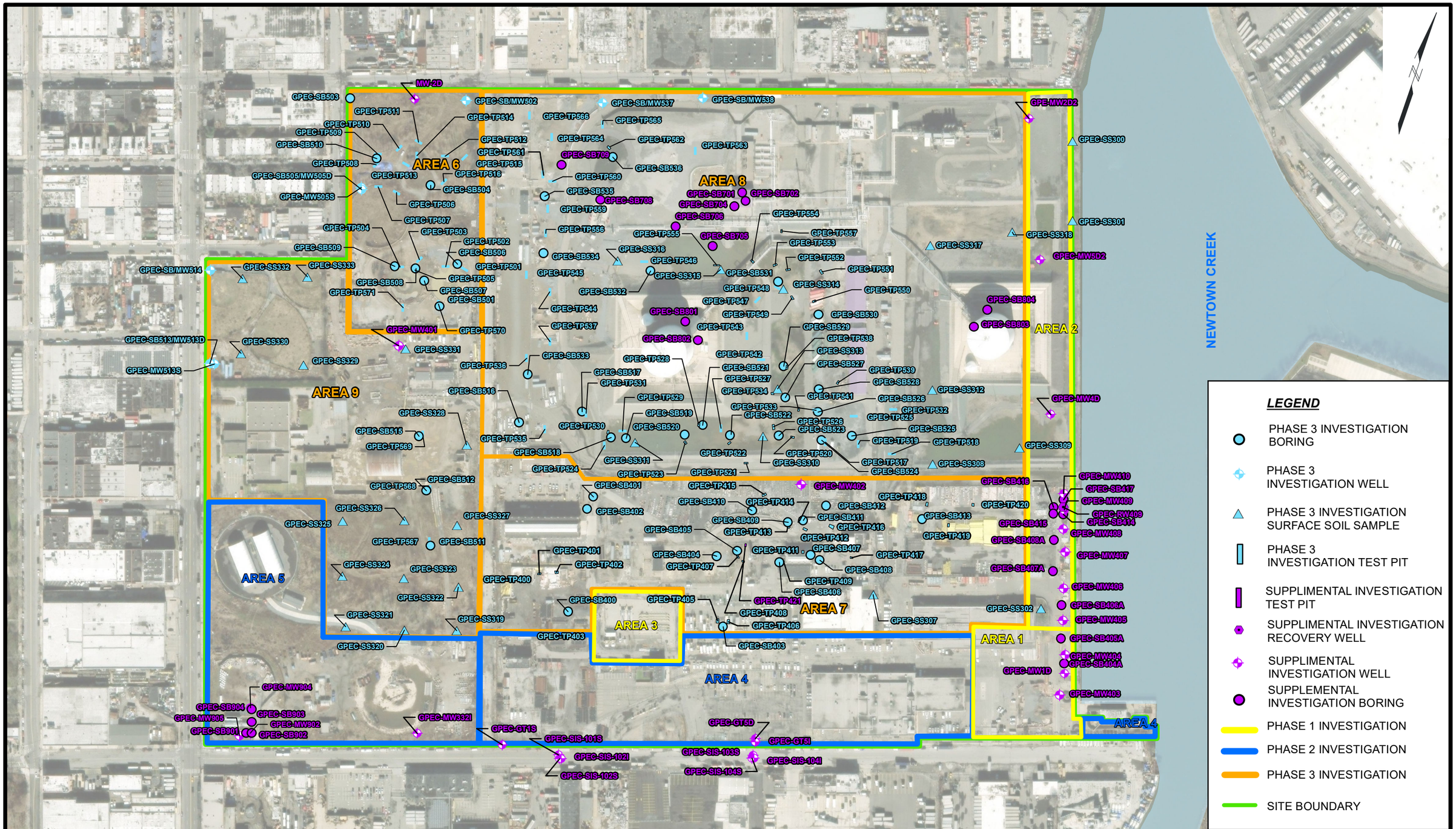
nationalgrid

GEI Consultants

REMEDIAL INVESTIGATION
PHASE 2 SAMPLE LOCATIONS

Project 125180 | June 2026 | Fig. 11

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Phase 2 Sample Locations 11 17_250409.mxd




**SOURCES:**
1.AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

0 280 560
SCALE: 1" = 280'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

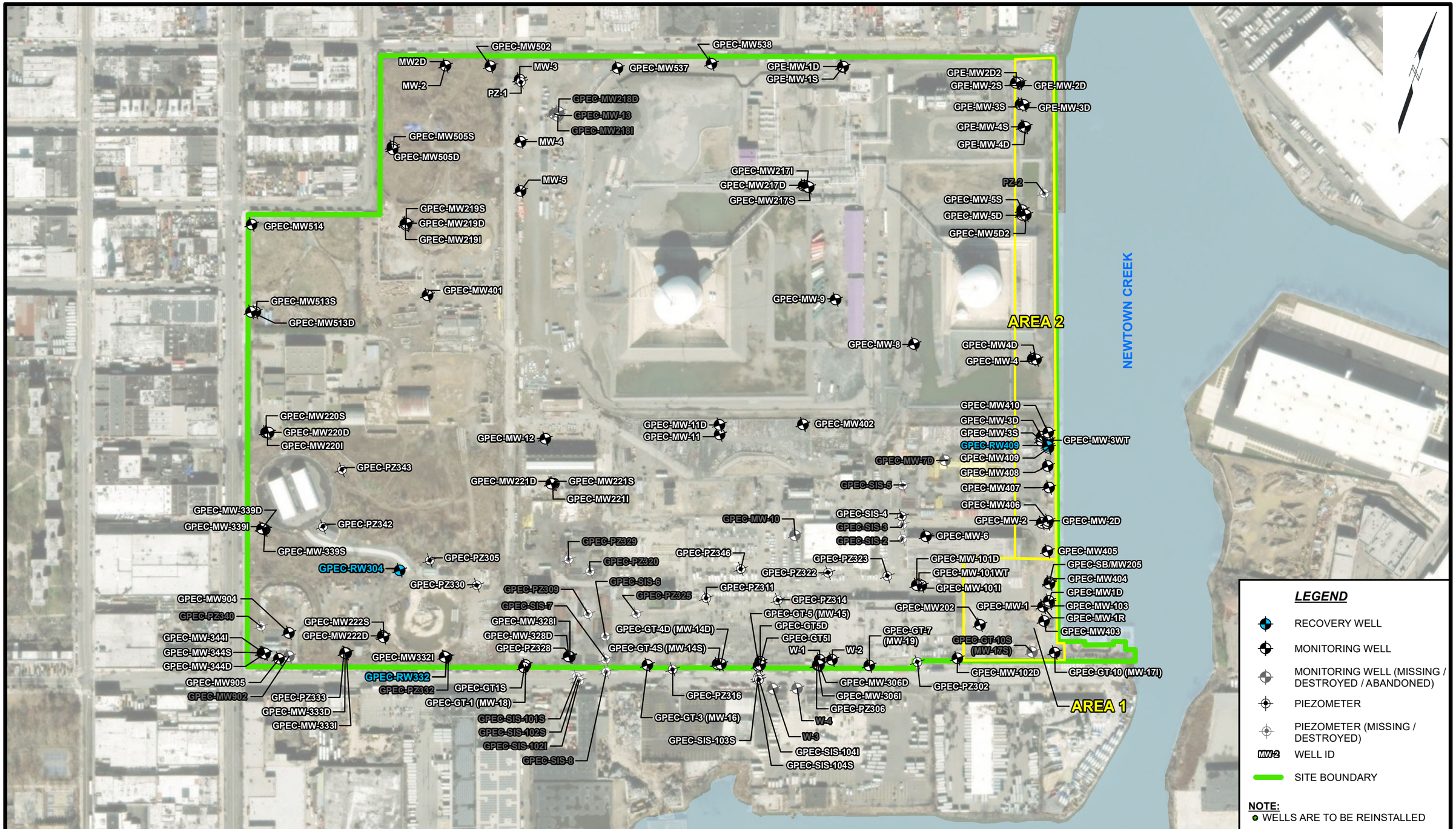
nationalgrid

GEI Consultants

REMEDIAL INVESTIGATION
PHASE 3 AND SUPPLEMENTAL
INVESTIGATION SAMPLE
LOCATIONS

Project 125180 | June 2026 | Fig. 12

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Phase 3 and SRI Sample Locations_250409.mxd




***SOURCES:***
AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

MONITORING & RECOVERY WELL AND PIEZOMETER LOCATION MAP

Project 125180 | June 2026 | Fig. 13

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\RIR\125180_RIR_MWPZ_250409.mxd

AREA 6
AREA 8
AREA 9
AREA 2
AREA 5
AREA 3
AREA 4
AREA 7
AREA 1
AREA 4

GPEC-OALNGCONTROL
GPEC-IA326/SV326
GPEC-IA325/SV325
LNG CONTROL HOUSE
GPEC-OANSTORAGE
GPEC-IA328/SV328
GPEC-OANSTORAGE
LNG NORTH STORAGE BUILDING
GPEC-OASSTORAGE
LNG TANK No. 1
LNG SOUTH STORAGE BUILDING
GPEC-IA331/SV331
NEWTOWN CREEK
GPEC-OAMETEROPS
GPEC-IA301/SV301
GPEC-IA302/SV302
METER OPERATIONS BUILDING
GPEC-IA304/SV304
GPEC-IA303/SV303
GPEC-OAWELD
GPEC-IA323/SV323
GPEC-IA324/SV324
WELDING SHOP (BUILDING 18)
GPEC-OALNGGUARD
GPEC-IA330/SV330
GPEC-OALNGGUARD
LNG GUARD HOUSE
GPEC-OASANDS
GPEC-IA334/SV334
GPEC-IA333/SV333
SERVICE AND STORAGE (S&S) BUILDING (BUILDING 19)
BUILDING 13
GPEC-IA329/SV329
BUILDING 12
GPEC-OABLDG12
GPEC-IA307/SV307
GPEC-IA308/SV308
GPEC-OABLDG11
VARICK CONTROL HOUSE
GPEC-IA332/SV332
GPEC-IA309/SV309
GPEC-IA310/SV310
BUILDING 11
GPEC-OABLDG11
GPEC-IA312/SV312
GPEC-OASERVICE
GPEC-OASTORES
STORES BUILDING (BUILDING C)
GPEC-IA311/SV311
GPEC-IA319/SV319
GPEC-IA322/SV322
GPEC-IA320/SV320
GPEC-IA321/SV321
GPEC-IA314/SV314
GPEC-IA320/SV320
GPEC-IA313/SV313
SERVICE BUILDING (BUILDING B)
GPEC-OASTORES
GPEC-OAFACILITIES
GPEC-IA305/SV305
GPEC-IAFACILTIES2NDFLOOR
GPEC-OAFACILITIES
GPEC-IA/SV306
FACILITIES BUILDING (BUILDING 21)
GPEC-OATRANSPORTATION
GPEC-IA315/SV315
GPEC-IA317/SV317
GPEC-IA318/SV318
TRANSPORTATION BUILDING (BUILDING D)
GPEC-IA316/SV316
GATEHOUSE BUILDING (BUILDING A)
GPEC-OAGATEHOUSE
GPEC-OAGATEHOUSE
GPEC-IA317/SV317
GPEC-IA327

***LEGEND***
- OUTDOOR AIR SAMPLE (MARCH/JUNE 2019)
- OUTDOOR AIR SAMPLE (MARCH 2018)
- ELIMINATED INDOOR AIR/ SOIL VAPOR SAMPLE LOCATION
- INDOOR AIR/SOIL VAPOR SAMPLE
- HISTORICAL STRUCTURES
- SITE BOUNDARY
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION

***SOURCES:***
1. FIGURE BASED ON PLAN TITLED "PROPOSED SOIL BORINGS/TEST PIT, MONITORING WELL AND SOIL GAS SAMPLE LOCATION SITE PLAN," BY PAULIUS SOKOLOWSKI AND SARTOR ENGINEERING, PC DATED OCT 2004.
2. SURVEY OF EXISTING MONITORING WELLS CONDUCTED BY GEI ON 6-16-09.
3. AERIAL PHOTO IMAGERY OBTAINED FROM ESRI WORLD IMAGERY

0 50 100 200
SCALE: 1" = 100'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

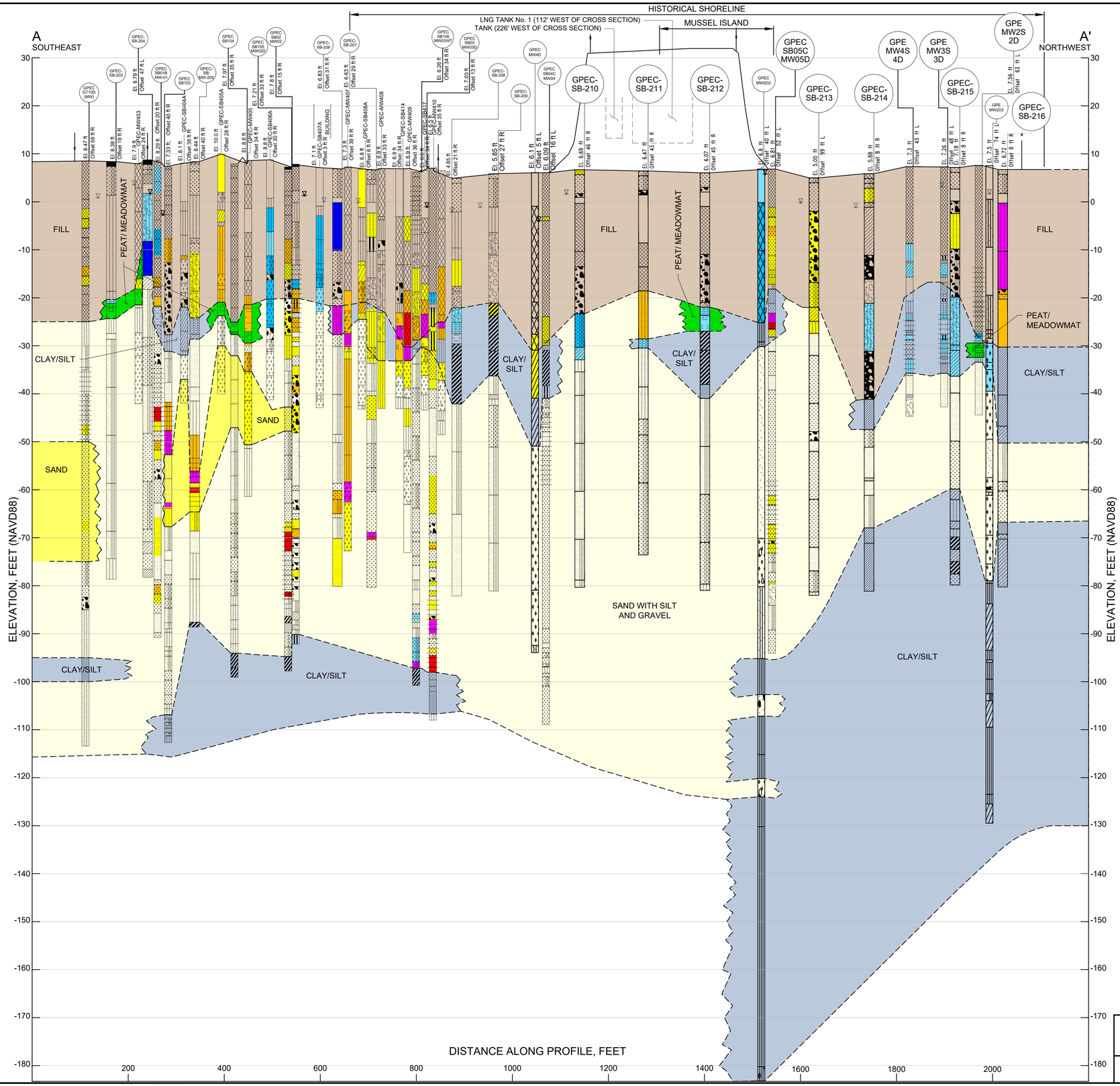
Project 125180

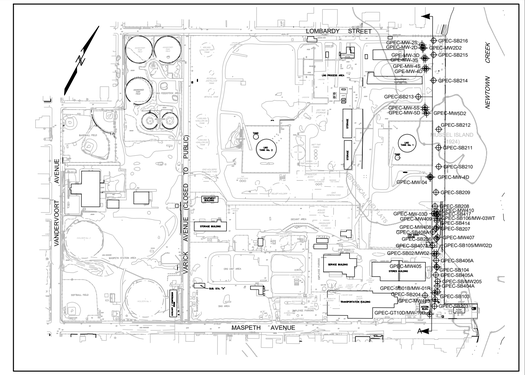
GEI Consultants

**SOIL VAPOR INTRUSION SAMPLING LOCATIONS**

June 2026 Fig. 14

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\SVI_Locations_251015.mxd




**PROFILE LOCATION MAP**

0 1000 2000

SCALE: 1" = 1000'

***LEGEND***

GPEC-MW-1 — BORING NUMBER

EL 14.7 / 29' E — ELEVATION OF GROUND SURFACE AND OFFSET OF BORING FROM PROFILE LINE

EXISTING GROUND SURFACE

GROUNDWATER ELEVATION (FT)

INTERPRETIVE STRATUM BOUNDARY

GROUNDWATER LEVEL MEASURED AT COMPLETETION OF DRILLING

GROUNDWATER LEVEL MEASURED IN MONITORING WELL

SCREENED SECTION OF OBSERVATION WELL

LITHOLOGY

- ASPHALT
- FILL
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- CH, FAT CLAY
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, PPORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
- GW, WELL GRADED GRAVEL, WELL GRADED GRAVEL WITH SAND
- BOULDERS AND COBBLES
- CREEK SEDIMENT
- PEAT/MEADOW MAT

STRATIGRAPHY

- FILL
- SEDIMENTS
- ORGANIC CLAY
- CLAY/SILT
- SILT
- SAND WITH SILT AND GRAVEL
- SAND
- WATER
- PEAT/MEADOW MAT

PHYSICAL OBSERVATIONS

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/SULFER-LIKE ODOR
- NO OBSERVED IMPACTS

HORIZONTAL SCALE: 1" = 100'

0 100' 200'

0 10' 20'

VERTICAL SCALE: 1" = 10'

NOTE: 10x VERTICAL EXAGGERATION

NOTE: SEVERAL BORINGS SHIFTED SLIGHTLY FROM SURVEYED LOCATION FOR VISIBILITY.

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

SUBSURFACE PROFILE A

Project 125180 | June 2026 | Fig. 15

\\WAS1L-OJANN C:\Users\ojanney\Downloads\14 125180-RIR-XSC A.dwg - 2/12/2021

B
SOUTHEAST

B'
NORTHWEST

ELEVATION, FEET (NAVD88)

GPEC GT10D (MW) | GPEC SED03 | GPEC SB110 | NC298SC-A | GPEC SED09 | GPEC GT14 | NC075SC-A | GPEC SED12 | GPEC GT12 | GPEC SED06 | GPEC SB111 | GPEC SB112 | NC072ASC | GPEC SED15 | GPEC GT16 | GPEC SED18 | SD206 | SD128 | NC296SC-A | SD205 | GPEC GT18 | SD147 B & C Core | NC069ASC | GPEC SB113 | GPEC GT20 | SD158 A & B Core | GPEC SB114 | SD141 A & B Core | GPEC GT22 | NC066ASC

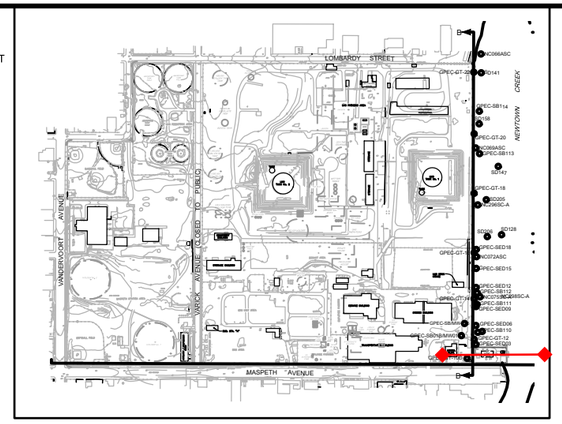
NEWTOWN CREEK

FILL
SEDIMENTS
CLAY/SILT
SAND
SAND WITH SILT AND GRAVEL
CLAY/SILT
SAND
CLAY/SILT
SAND WITH SILT AND GRAVEL
SAND
CLAY/SILT

DISTANCE ALONG PROFILE, FEET

HORIZONTAL SCALE: 1" = 200'
0 200' 400'

0 20' 40'
VERTICAL SCALE: 1" = 10'
NOTE: 10x VERTICAL EXAGGERATION




# PROFILE LOCATION MAP

0 1000 2000

SCALE: 1" = 1000'

N

## LEGEND

GPEC-MW-1 — BORING NUMBER

EL 11.7 / 20' E — ELEVATION OF GROUND SURFACE AND OFFSET OF BORING FROM PROFILE LINE

EXISTING GROUND SURFACE

GROUNDWATER ELEVATION (FT)

INTERPRETIVE STRATUM BOUNDARY

GROUNDWATER LEVEL MEASURED AT COMPLETETION OF DRILLING

GROUNDWATER LEVEL MEASURED IN MONITORING WELL

SCREENED SECTION OF OBSERVATION WELL

### LITHOLOGY

- ASPHALT
- FILL
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- CH, FAT CLAY
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
- GW, WELL GRADED GRAVEL, WELL GRADED GRAVEL WITH SAND
- BOULDERS AND COBBLES
- CREEK SEDIMENT
- PEAT/MEADOW MAT

### STRATIGRAPHY

- FILL
- SEDIMENTS
- CLAY/SILT
- SAND WITH SILT AND GRAVEL
- SAND
- WATER
- PEAT/MEADOW MAT

### PHYSICAL OBSERVATIONS

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/SULFER-LIKE ODOR
- NO OBSERVED IMPACTS

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

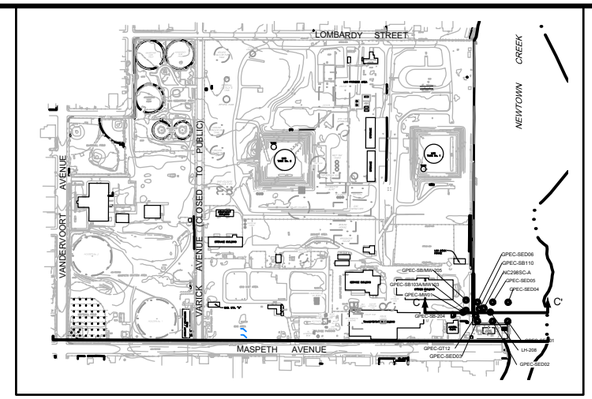
nationalgrid

GEI Consultants

SUBSURFACE PROFILE B

Project 125180 | June 2026 | Fig. 16

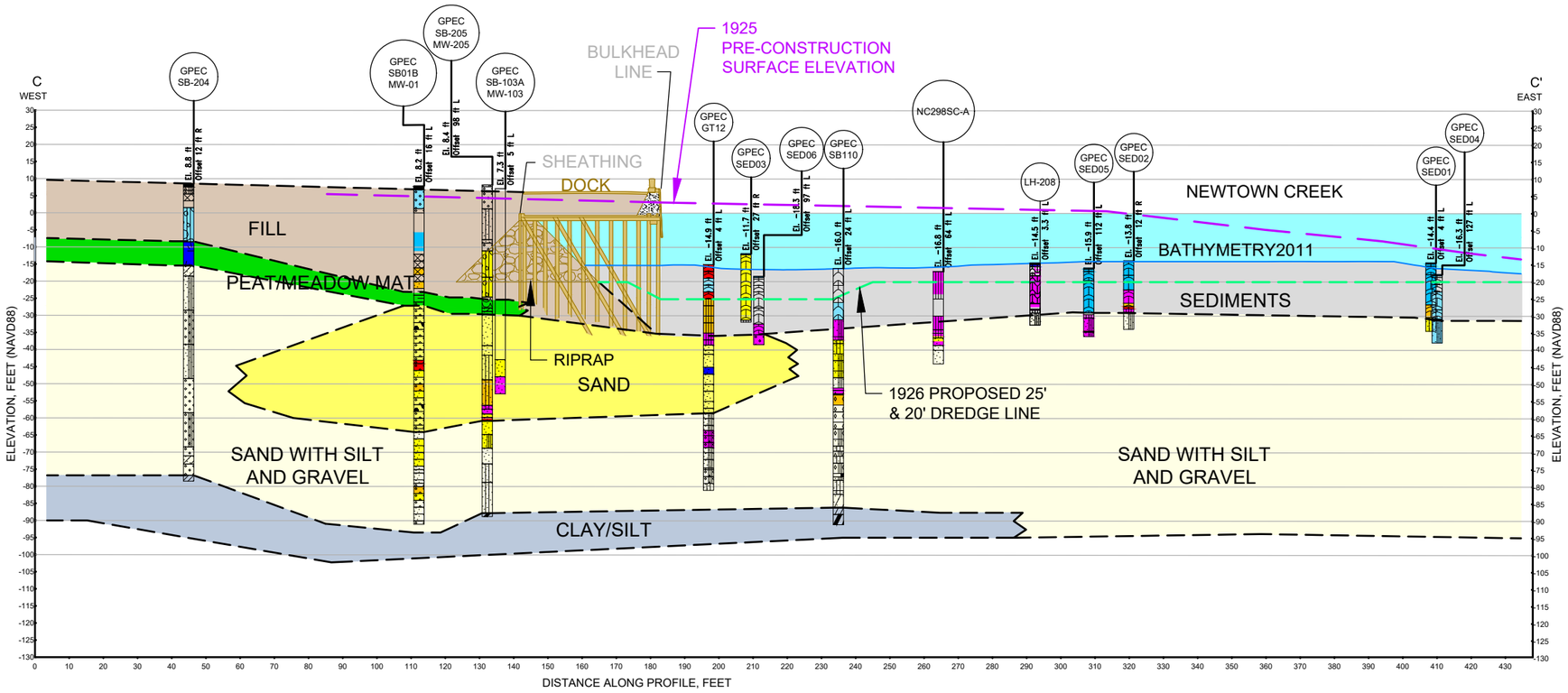
\\WAS1L-OJANN C:\Users\ojanney\Downloads\15 12180-RIR-XSC B.dwg - 2/12/2021




## PROFILE LOCATION MAP

0 1000 2000

SCALE: 1" = 1000'




HORIZONTAL SCALE: 1" = 400'

0 400' 800'

0 40' 80'

VERTICAL SCALE: 1" = 10'

NOTE: 10x VERTICAL EXAGGERATION

### LEGEND

- BORING NUMBER
- ELEVATION OF GROUND SURFACE AND OFFSET OF BORING FROM PROFILE LINE
- EXISTING GROUND SURFACE
- GROUNDWATER ELEVATION (FT)
- INTERPRETIVE STRATUM BOUNDARY
- GROUNDWATER LEVEL MEASURED AT COMPLETETION OF DRILLING
- GROUNDWATER LEVEL MEASURED IN MONITORING WELL
- SCREENED SECTION OF OBSERVATION WELL

**LITHOLOGY**

- ASPHALT
- FILL
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- CH, FAT CLAY
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
- GW, WELL GRADED GRAVEL, WELL GRADED GRAVEL WITH SAND
- BOULDERS AND COBBLES
- CREEK SEDIMENT
- PEAT/MEADOW MAT

**STRATIGRAPHY**

- FILL
- SEDIMENTS
- CLAY/SILT
- SAND WITH SILT AND GRAVEL
- SAND
- WATER
- PEAT/MEADOW MAT

**PHYSICAL OBSERVATIONS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/SULFER-LIKE ODOR
- NO OBSERVED IMPACTS

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

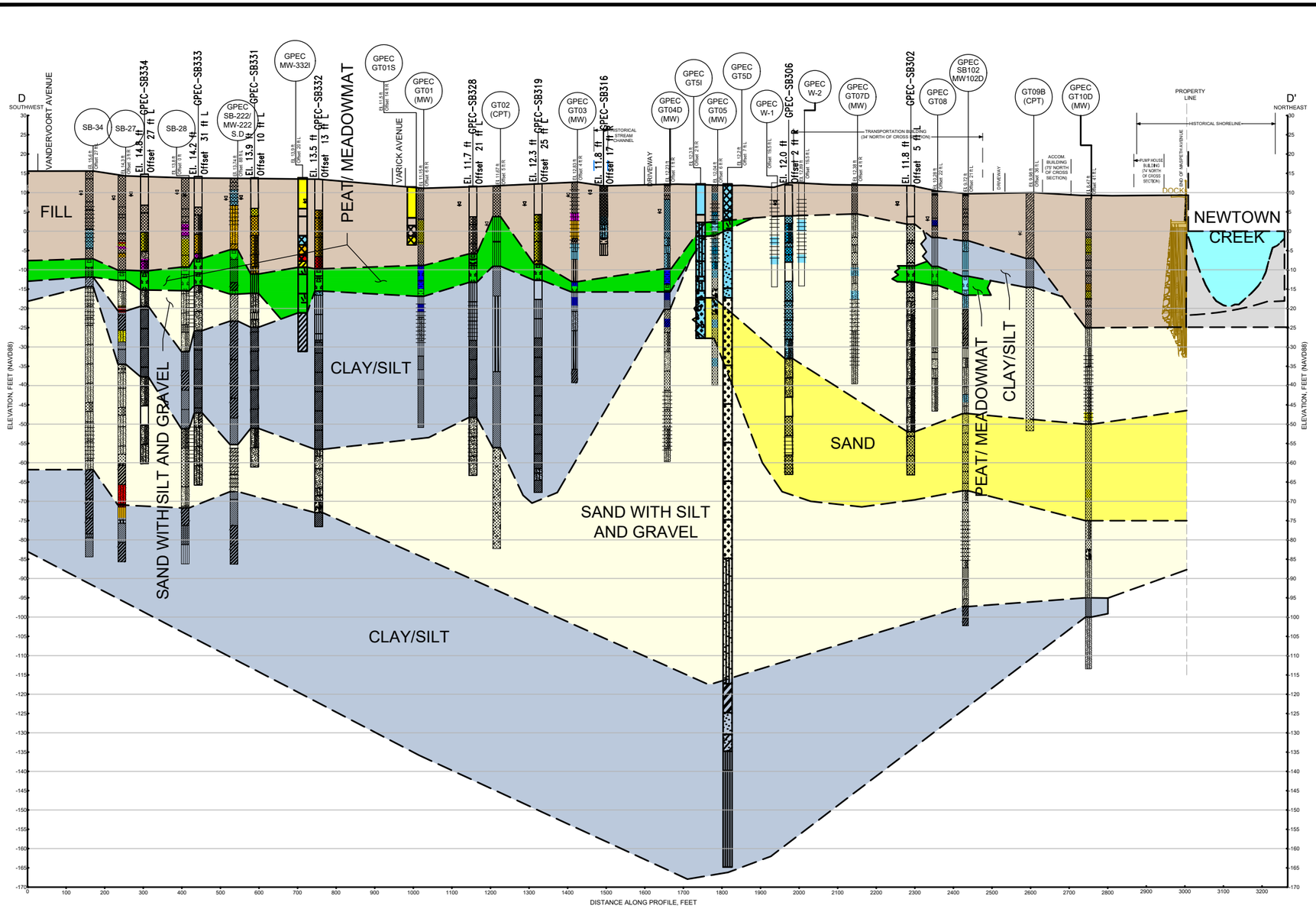
nationalgrid

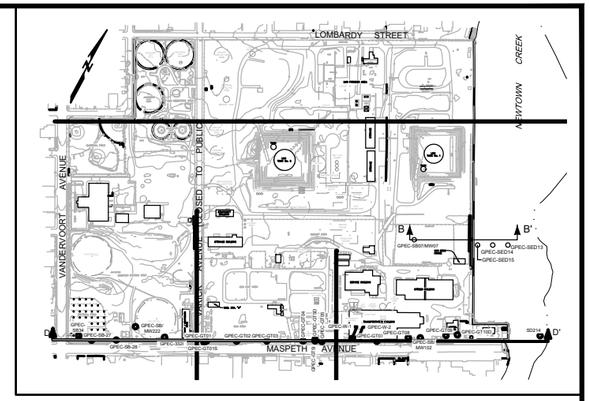
GEI Consultants

# SUBSURFACE PROFILE C

Project 125180 | June 2026 | Fig. 17

\\WAS1L-OJANN C:\Users\ojanney\Downloads\16 12180-RIR-XSC C.dwg - 2/12/2021




## PROFILE LOCATION MAP

0 1000 2000

SCALE: 1" = 1000'

***LEGEND***

GPEC-MW-1 — BORING NUMBER

EL 11.7 / 20' E — ELEVATION OF GROUND SURFACE AND OFFSET OF BORING FROM PROFILE LINE

EXISTING GROUND SURFACE

GROUNDWATER ELEVATION (FT)

INTERPRETIVE STRATUM BOUNDARY

GROUNDWATER LEVEL MEASURED AT COMPLETETION OF DRILLING

GROUNDWATER LEVEL MEASURED IN MONITORING WELL

SCREENED SECTION OF OBSERVATION WELL

LITHOLOGY

- ASPHALT
- FILL
- OH, MODERATE TO HIGHLY PLASTIC ORGANIC SILTS AND CLAYS
- CH, FAT CLAY
- MH, ELASTIC SILT
- OL, LOW PLASTICITY ORGANIC SILTS AND CLAYS
- CL, LEAN CLAY OR SANDY LEAN CLAY
- ML, SILT OR SANDY SILT
- SC, CLAYEY SAND
- SM, SILTY SAND, SILTY SAND WITH GRAVEL
- SP, POORLY GRADED SAND, PPORLY GRADED SAND WITH GRAVEL
- SW, WELL GRADED SAND, WELL GRADED SAND WITH GRAVEL
- GC, CLAYEY GRAVEL
- GM, SILTY GRAVEL, SILTY GRAVEL WITH SAND
- GP, POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
- GW, WELL GRADED GRAVEL, WELL GRADED GRAVEL WITH SAND
- BOULDERS AND COBBLES
- CREEK SEDIMENT
- PEAT/MEADOW MAT

STRATIGRAPHY

- FILL
- SEDIMENTS
- ORGANIC CLAY
- CLAY/SILT
- SILT
- SAND WITH SILT AND GRAVEL
- SAND
- WATER

PHYSICAL OBSERVATIONS

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHE
- INDUSTRIAL IMPACTS - (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/SULFER-LIKE ODOR
- NO OBSERVED IMPACTS

HORIZONTAL SCALE: 1" = 300'

0 300' 600'

0 30' 60'

VERTICAL SCALE: 1" = 10'

NOTE: 10x VERTICAL EXAGGERATION

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

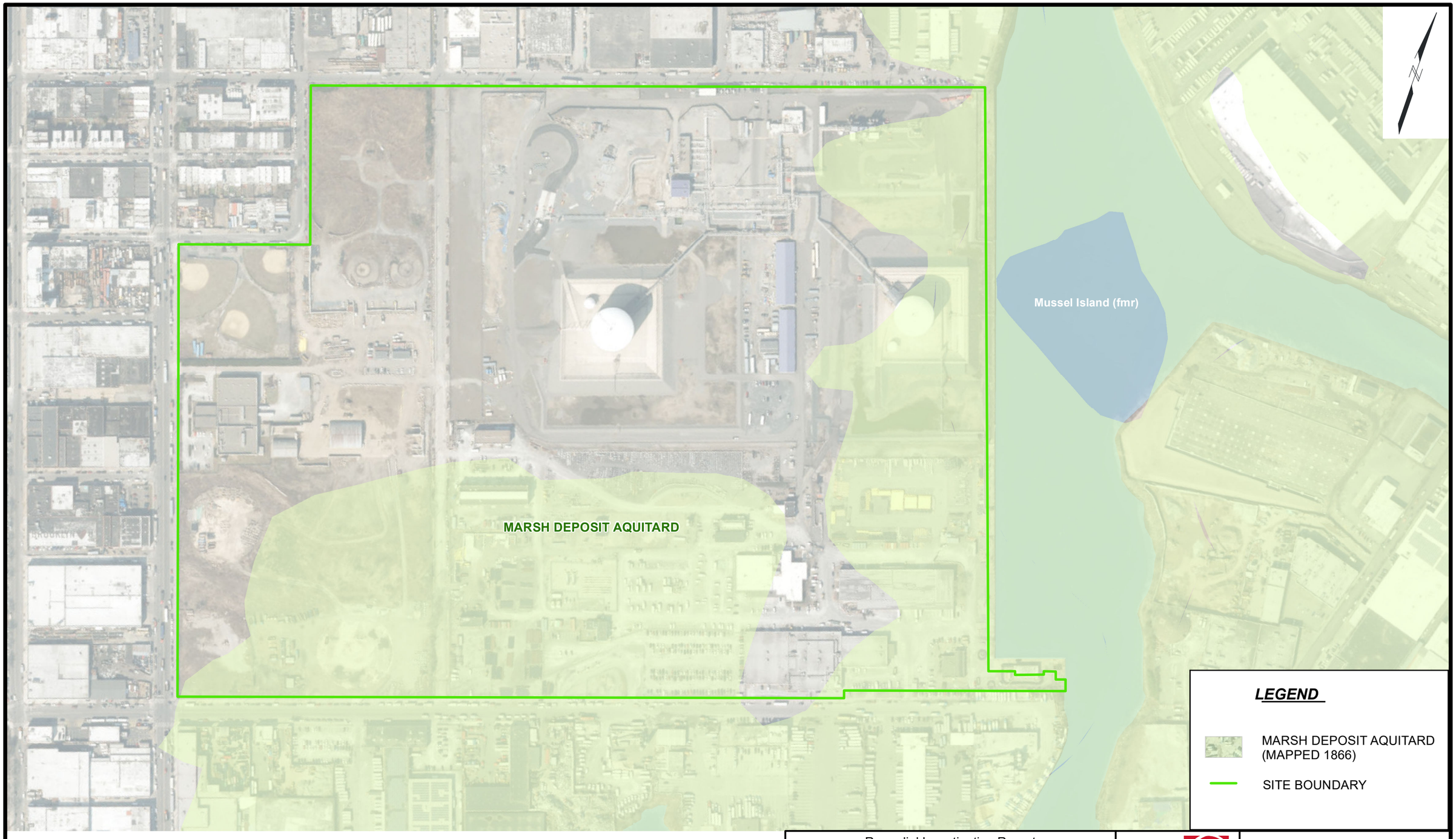
nationalgrid

GEI Consultants

SUBSURFACE PROFILE D

Project 125180 | June 2026 | Fig. 18

\\WAS1L-OJANN C:\Users\ojanney\Downloads\17 125180-RIR-XSC D.dwg - 2/12/2021




***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600
SCALE: 1"= 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

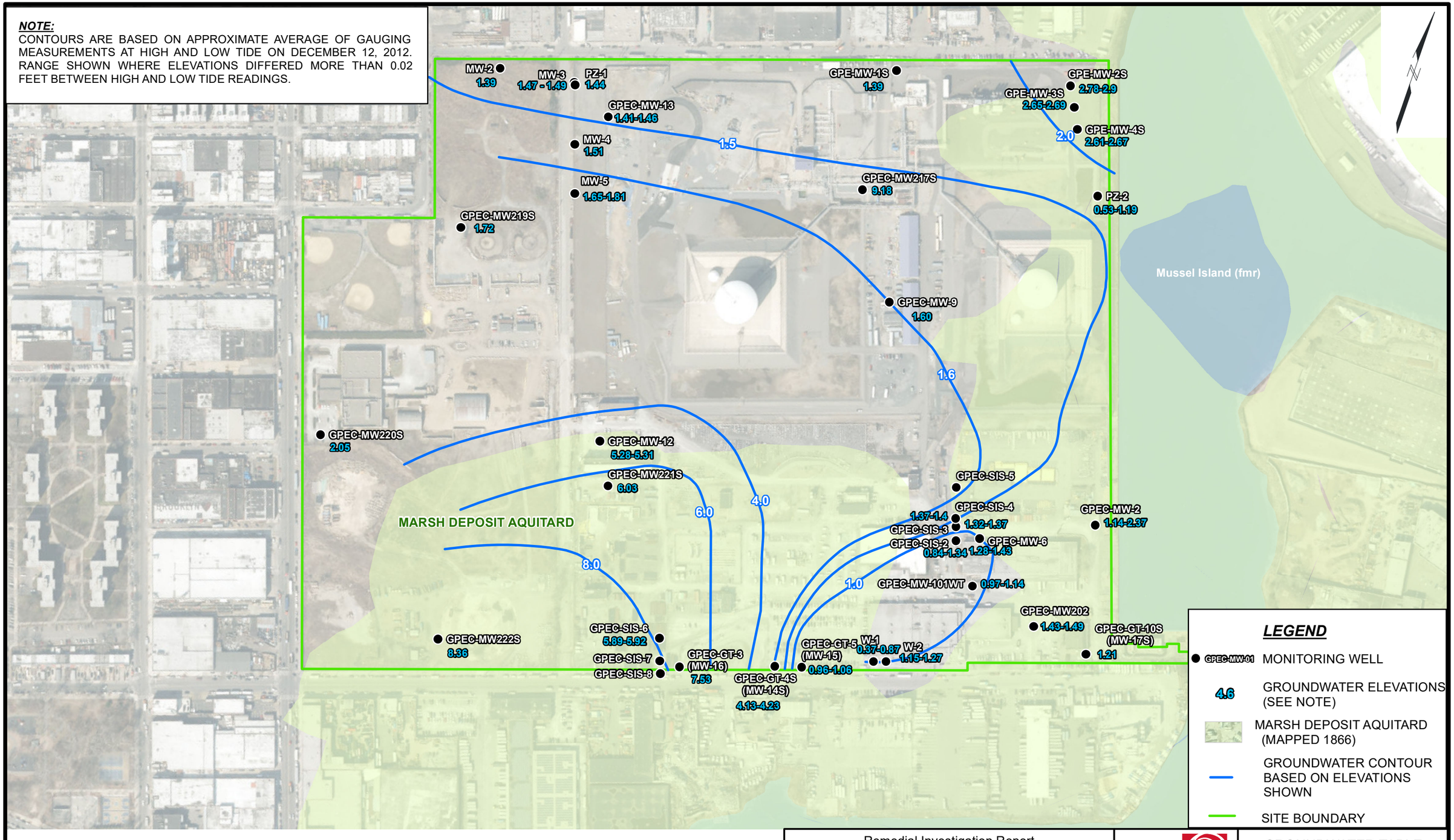
GEI Consultants

MARSH DEPOSITS LOCATION

Project 125180 | June 2026 | Fig. 19

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Meadow Mat_250409.mxd

***NOTE:***
CONTOURS ARE BASED ON APPROXIMATE AVERAGE OF GAUGING MEASUREMENTS AT HIGH AND LOW TIDE ON DECEMBER 12, 2012. RANGE SHOWN WHERE ELEVATIONS DIFFERED MORE THAN 0.02 FEET BETWEEN HIGH AND LOW TIDE READINGS.




## LEGEND

- GPEC-MW-01 — MONITORING WELL
- 4.6 — GROUNDWATER ELEVATIONS (SEE NOTE)
- MARSH DEPOSIT AQUITARD (MAPPED 1866)
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

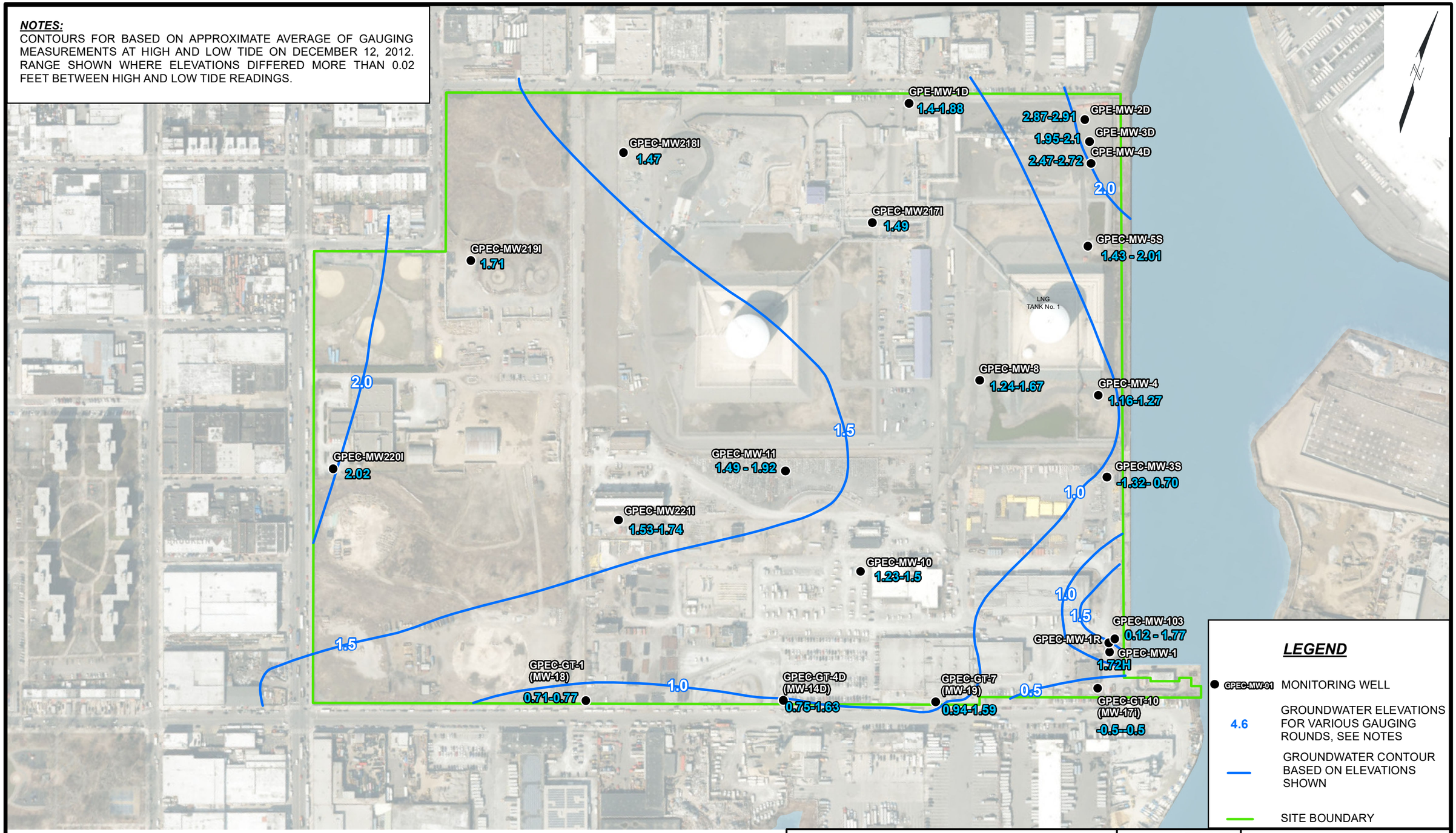
GEI Consultants

GROUNDWATER TABLE ELEVATION CONTOURS DECEMBER 2012

Project 125180 | June 2026 | Fig. 20

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours-shallow_2012_250409.mxd

***NOTES:***
CONTOURS FOR BASED ON APPROXIMATE AVERAGE OF GAUGING MEASUREMENTS AT HIGH AND LOW TIDE ON DECEMBER 12, 2012. RANGE SHOWN WHERE ELEVATIONS DIFFERED MORE THAN 0.02 FEET BETWEEN HIGH AND LOW TIDE READINGS.




***LEGEND***

- GPEC-MW-01 — MONITORING WELL
- 4.6 — GROUNDWATER ELEVATIONS FOR VARIOUS GAUGING ROUNDS, SEE NOTES
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

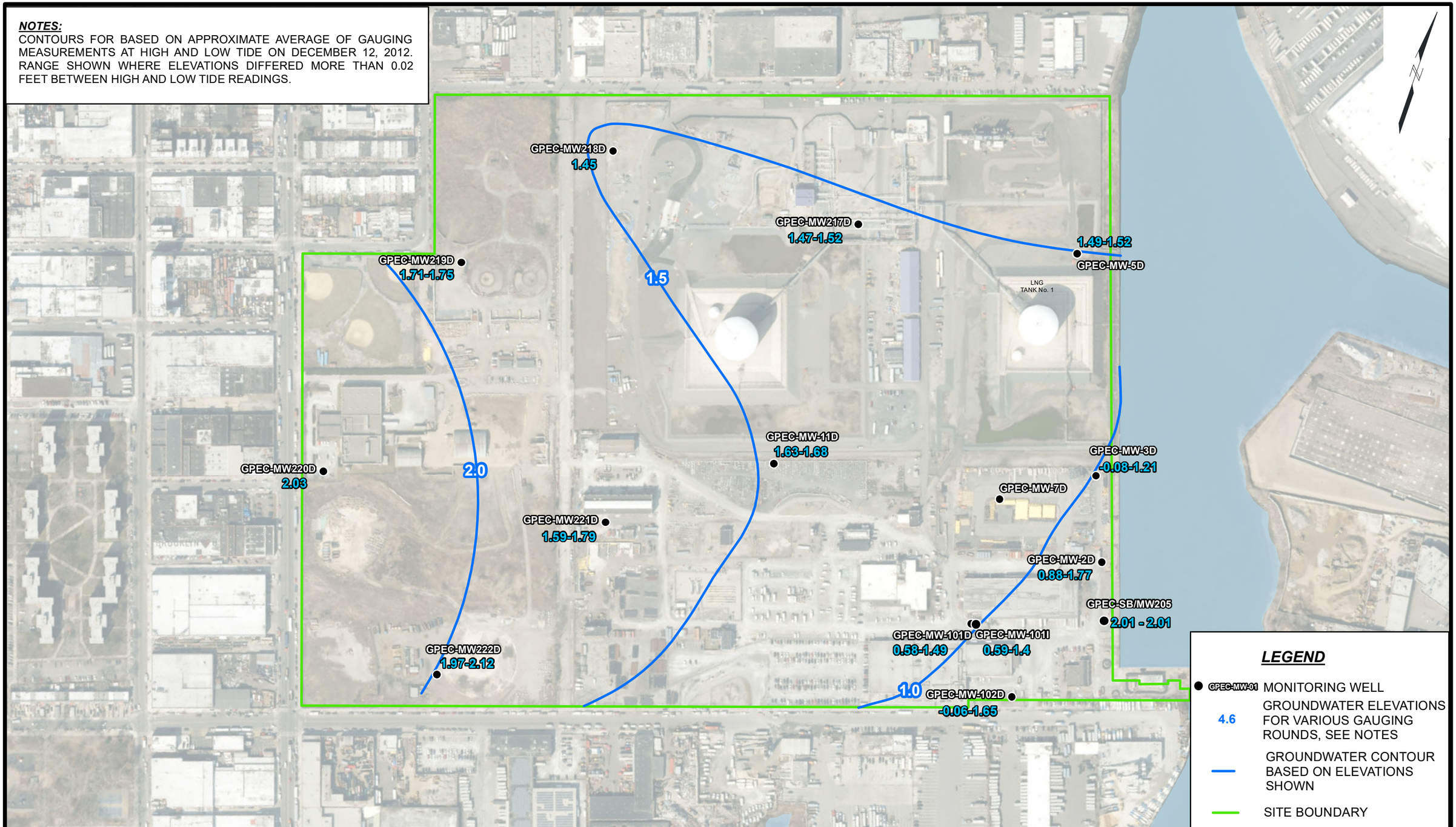
GEI Consultants

INTERMEDIATE ZONE GROUNDWATER ELEVATION CONTOURS DECEMBER 2012

Project 125180 | June 2026 | Fig. 21

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours-intermediate_2012_250409.mxd

***NOTES:***
CONTOURS FOR BASED ON APPROXIMATE AVERAGE OF GAUGING MEASUREMENTS AT HIGH AND LOW TIDE ON DECEMBER 12, 2012. RANGE SHOWN WHERE ELEVATIONS DIFFERED MORE THAN 0.02 FEET BETWEEN HIGH AND LOW TIDE READINGS.




***LEGEND***

- GPEC-MW-01 MONITORING WELL
- 4.6 GROUNDWATER ELEVATIONS FOR VARIOUS GAUGING ROUNDS, SEE NOTES
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

***SOURCES:***
1.AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

DEEP ZONE GROUNDWATER ELEVATION CONTOURS DECEMBER 2012

Project 125180 | June 2026 | Fig. 22

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours-deep_2012_250409.mxd

***NOTE:***
GROUNDWATER ELEVATIONS SHOWN ARE IN UNITS OF FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

CONTOURS BASED ON APPROXIMATE AVERAGE OF GAUGING MEASUREMENTS AT HIGH AND LOW TIDE ON OCTOBER 9, 2015.

*GPEC-MW217S NOT INCLUDED FOR CONTOURING DUE TO SIGNIFICANT PONDING WITHIN THE AREA OF WELL.

MW-2 1.97
MW-3 1.98
PZ-1 1.96
GPEC-MW-13 1.98
MW-4 2.04
MW-5 2.13
GPE-MW-1S 2.02
GPE-MW-2S 3.52
GPE-MW-3S 3.13
GPE-MW-4S 3.12
GPEC-MW217S* 12.6
Mussel Island (fmr)
GPEC-MW-9 2.2
3.5
5.5
5.5
5.5
GPEC-MW220S 2.41
GPEC-MW-12 6.14
GPEC-PZ343 7.02
GPEC-MW221S 6.36
GPEC-SIS-5 7.82
7.5
MARSH DEPOSIT AQUITARD
GPEC-SIS-4 2.17
GPEC-SIS-3 2.13
GPEC-MW-3 6.71
GPEC-PZ342 11.45
9.5
GPEC-SIS-2 2.31
GPEC-MW-6 2.07
GPEC-MW-2 1.9
GPEC-PZ329 5.96
GPEC-PZ346 6.8
GPEC-PZ322 2.11
GPEC-PZ305 9.93
GPEC-PZ320 6.01
7.5
GPEC-PZ323 1.93
GPEC-MW-101WT 2.02
GPEC-PZ330 7
GPEC-PZ311 8
GPEC-PZ314 4.79
GPEC-PZ309 6.58
GPEC-PZ325 9.31
GPEC-MW202 2.17
GPEC-PZ340 8.13
GPEC-MW222S 8.48
GPEC-MW-344S 7.96
GPEC-PZ328 5.46
GPEC-GT-3 (MW-16) 8.23
GPEC-GT-4S (MW-14S) 4.84
W-1 2.02
W-2 2.04
GPEC-PZ302 2.16
GPEC-PZ332 8.21
GPEC-PZ3 8.05
5.5
GPEC-GT-5 (MW-15) 4.23
GPEC-PZ306 1.9

***LEGEND***

| | |
|---|---|
| GPEC-MW-01 | MONITORING WELL |
| 4.6 | GROUNDWATER ELEVATIONS (SEE NOTE) |
| | MARSH DEPOSIT AQUITARD (MAPPED 1866) |
| | GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN |
| | SITE BOUNDARY |
| | 1924 WATERCOURSE |
| | 1900s WATERCOURSE |
| | 1776 WATERCOURSE |

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

GROUNDWATER TABLE ELEVATION CONTOURS OCTOBER 2015

Project 125180 | June 2026 | Fig. 23

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Oct_Shallow_AVERAGE_2015_250409.mxd

***NOTE:***
GROUNDWATER ELEVATIONS SHOWN ARE IN UNITS OF FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

CONTOURS BASED ON APPROXIMATE AVERAGE OF GUAGING MEASUREMENTS AT HIGH AND LOW TIDE ON OCTOBER 9, 2015.

*GPEC-MW-8 NOT USED FOR CONTOUR PREPERATION DUE TO RAPID TIDAL RESPONSE IN WELL.

GPE-MW-1D 2.03
GPE-MW-2D 3.38
GPE-MW-3D 2.19
GPE-MW-4D 2.88
GPEC-MW218I 2.02
GPEC-MW217I 2.15
GPEC-MW-5S 2.11
GPEC-MW-8* 0.68
GPEC-MW-4 3.1
GPEC-MW220I 2.41
GPEC-MW-11 2.29
GPEC-MW-3S 1.5
GPEC-MW221I 2.25
GPEC-MW-339I 2.56
GPEC-MW-103 1.8
GPEC-MW-1R 0.85
GPEC-GT-10 (MW-17I) -0.8
GPEC-MW-344I 2.27
GPEC-MW-333I 2.44
GPEC-GT-1 (MW-18) 1.73
GPEC-MW-328I 1.6
GPEC-GT-4D (MW-14D) 1.93
GPEC-MW-306I 2.02
GPEC-GT-7 (MW-19) 1.99

***LEGEND***

- GPEC-MW-01 MONITORING WELL
- 4.6 GROUNDWATER ELEVATIONS (SEE NOTE)
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. KS. ENGINEERS SURVEY MAY, AUGUST AND SEPTEMBER OF 2015.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

INTERMEDIATE ZONE GROUNDWATER ELEVATION CONTOURS OCTOBER 2015

Project 125180 | June 2026 | Fig. 24

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Oct_Intermediate_AVERAGE2015_250409.mxd

***NOTE:***
GROUNDWATER ELEVATIONS SHOWN ARE IN UNITS OF FEET RELATIVE TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

CONTOURS BASED ON APPROXIMATE AVERAGE OF GAUGING MEASUREMENTS AT HIGH AND LOW TIDE ON OCTOBER 9, 2015.

GPEC-MW218D 2.02
2.05
GPEC-MW217D 2.16
GPEC-MW-5D 2.16
GPEC-MW220D 2.44
GPEC-MW-11D 2.24
GPEC-MW-3D 2.01
GPEC-MW-7D 2
2.25
GPEC-MW-339D 2.57
2.29
2.05
GPEC-MW-101D 1.88
GPEC-MW-101I 2
GPEC-SB/MW205 1.84
GPEC-MW222D 2.49
GPEC-MW-344D 2.77
2.45
GPEC-MW-333D 2.4
GPEC-MW-328D 2.12
GPEC-MW-306D 2.01
1.85
GPEC-MW-102D 1.84

***LEGEND***

- GPEC-MW-01 MONITORING WELL
- 4.6 GROUNDWATER ELEVATIONS (SEE NOTE)
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. KS. ENGINEERS SURVEY MAY, AUGUST AND SEPTEMBER OF 2015.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

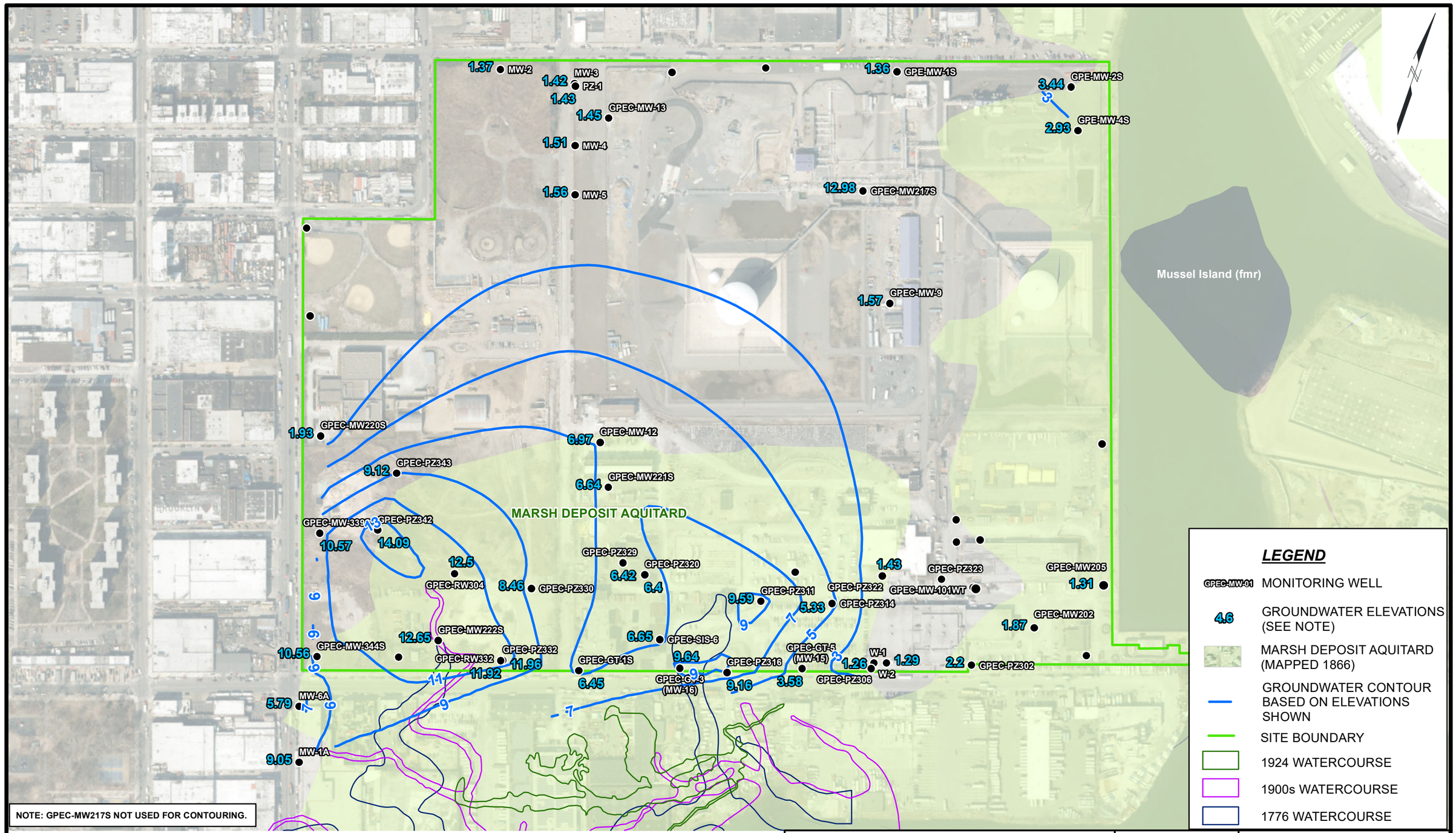
nationalgrid

GEI Consultants

DEEP ZONE GROUNDWATER ELEVATION CONTOURS OCTOBER 2015

Project 125180 | June 2026 | Fig. 25

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Oct_Deep_AVERAGE2015_250409.mxd




*SOURCES:*

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

GROUNDWATER TABLE ELEVATION CONTOURS MARCH 2017

Project 125180 | June 2026 | Fig. 26

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Shallow_March2017_250409.mxd




***SOURCES:***

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

Project 125180

INTERMEDIATE ZONE ELEVATION CONTOURS MARCH 2017

June 2026 Fig. 27

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Int_March2017_250409.mxd

MW-2D
GPEC-MW502
GPE-MW2D2
1.45 GPEC-MW218D
1.53 GPEC-MW217D
1.82 GPEC-MW-5D
1.64 GPEC-MW401
1.95 GPEC-MW-4D
1.75
GPEC-MW402
1.75 GPEC-MW-11D
1.57
GPEC-MW3D
1.94 GPEC-MW220D
1.75 GPEC-MW221D
1.36 GPEC-MW407
1.5
2.15 GPEC-MW-339D
1.56
1.41 GPEC-MW-101I
GPEC-SB/MW205
1.29 GPEC-MW-1D
GPEC-MW222D
GPEC-MW-333D
2.42
GPEC-MW-344D
1.83
1.48 GPEC-MW-328D
1.36 GPEC-MW-306D
1.35 GPEC-MW-102D
2.25
2
2.42 MW-1C
1.75
1.61 MW-19C

## LEGEND

- GPEC-MW-01 MONITORING WELL
- 4.6 GROUNDWATER ELEVATIONS (SEE NOTE)
- GROUNDWATER CONTOUR BASED ON ELEVATIONS SHOWN
- SITE BOUNDARY

**SOURCES:**

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

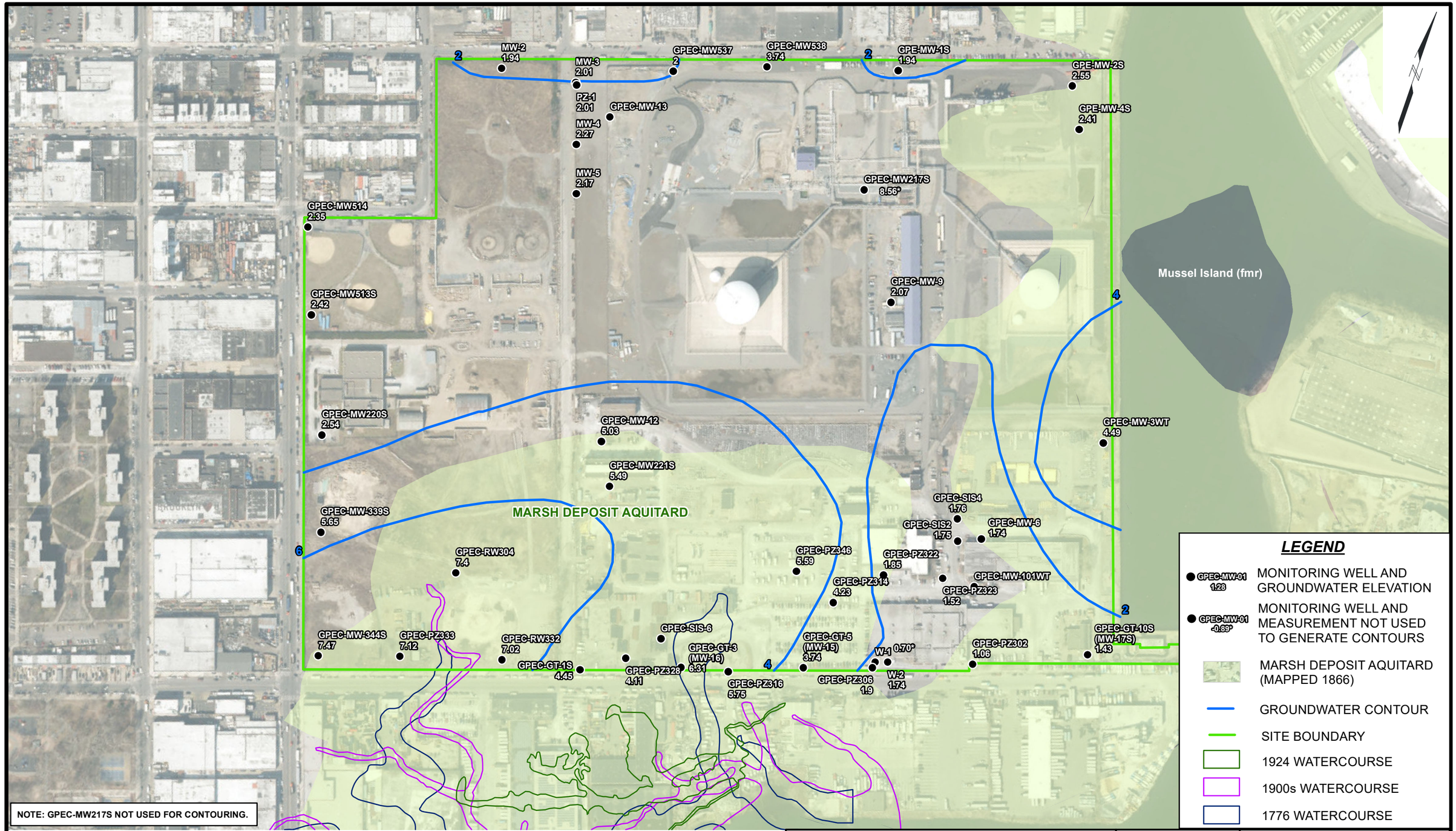
nationalgrid

GEI Consultants

DEEP ZONE ELEVATION CONTOURS MARCH 2017

Project 125180 | June 2026 | Fig. 28

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_DEEP_March2017_250409.mxd




***SOURCES:***

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

Project 125180

# GROUNDWATER TABLE ELEVATION CONTOURS OCTOBER 2024

June 2026 Fig. 29

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Shallow_October2024_2025_250409.mxd




## LEGEND

- GPEC-MW-01 1.28 — MONITORING WELL AND GROUNDWATER ELEVATION
- GPEC-MW-01 — ABONDONED MONITORING WELL
- GPEC-MW-01 -0.89* — MONITORING WELL AND MEASUREMENT NOT USED TO GENERATE CONTOURS
- GROUNDWATER CONTOUR
- SITE BOUNDARY

***SOURCES:***

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

INTERMEDIATE ZONE ELEVATION CONTOURS OCTOBER 2024

Project 125180 | June 2026 | Fig. 30

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_Int_October2024_2025_250409.mxd

MW-2D
1.81
GPEC-MW502
1.94
GPEC-MW218D
GPE-MW2D2
1.47
GPEC-MW217D
1.85
GPEC-MW-5D
2.7
GPEC-MW401
2.34
GPEC-MW-4D
4.28
GPEC-MW220D
2.6
GPEC-MW-11D
-0.89*
GPEC-MW402
1.97
GPEC-MW-3D
1.93
GPEC-MW221D
2.26
GPEC-MW407
1.28
GPEC-MW-339D
2.59
GPEC-MW-101I
1.8
GPEC-MW-1D
2.1
GPEC-MW222D
2.42
GPEC-MW-344D
3.09
GPEC-MW-333D
NM
GPEC-MW-328D
2.1
GPEC-MW-306D
1.82
GPEC-MW-102D
MW-1C
MW-19C

2
3
4

## LEGEND

- GPEC-MW-01 1.23 — MONITORING WELL AND GROUNDWATER ELEVATION
- GPEC-MW-01 — ABONDONED MONITORING WELL
- GPEC-MW-01 -0.89* — MONITORING WELL AND MEASUREMENT NOT USED TO GENERATE CONTOURS
- GROUNDWATER CONTOUR
- SITE BOUNDARY

***SOURCES:***

1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.
2. 1900, and 1776 MAPPED WATERCOURSES FROM BROOKLYN UNION GAS DRAWING 7C57, 1924 MAPPED WATERCOURSE FROM 1924 HISTORIC AERIAL PHOTO PROVIDED BY AECOM.
3. KS. ENGINNERS SURVEY MAY, AUGUST AND SEPTEMBER 2015.

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

DEEP ZONE ELEVATION CONTOURS OCTOBER 2024

Project 125180 | June 2026 | Fig. 31

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\GW_Contours_DEEP_October2024_2025_250409.mxd

AREA 6

AREA 8

AREA 2

AREA 9

AREA 7

AREA 3

AREA 5

AREA 4

AREA 1

AREA 4

GPEC-SS332
(0.2-0.5)
0.159 mg/kg

GPEC-SS333
(0.2-0.5)
0.133 mg/kg

GPEC-SS330
(0.2-0.5)
0.146 mg/kg

GPEC-SS329
(0.2-0.5)
0.14 mg/kg

GPEC-SB522
(3-4)
0.117 mg/kg

GPEC-SB529
(0.5 - 1)
2.32 mg/kg
(11-12)
0.216 mg/kg

GPEC-SB530
(0.5 1.5)
0.409 mg/kg

GPEC-SB520
(3-4)
0.126 mg/kg

GPEC-SB523
(3-4)
0.189 mg/kg

GPEC-SB524
(4-5)
0.267 mg/kg

GPEC-SB519
(3-4)
0.576 mg/kg

GPEC-SB220
(86-87)
0.192 mg/kg

GPEC-TP324C
(7.5-8)
0.124 mg/kg

GPEC-SS321
(0.2-0.5)
1.3 mg/kg

GPEC-SB341A
(5-5.5)
0.827 mg/kg

GPEC-TP321D
(6-6.5)
0.967 mg/kg

GPEC-SS322
(0.2-0.5)
7.02 mg/kg

GPEC-SS305
(0.2-0.5)
0.379 mg/kg

GPEC-TP321A
(8-8.5)
0.41 mg/kg

GPEC-TP321C
(4-4.5)
2.99 mg/kg

GPEC-SB413
(5 - 5 )
0.742 mg/kg

GPEC-SB413
(9- 10)
0.717 mg/kg

GPEC-SB07
(3-4)
0.125 mg/kg

GPEC-TP205
(7.5-8)
0.199 mg/kg

GPEC-TP419
(4 - 4.5)
0.416 mg/kg

GPEC-TP308B
(9.5-10)
0.597 mg/kg

GPEC-GT08
(7.5-9)
0.245 mg/kg

***LEGEND:***

- EXCEEDS UUSCO's - 0.1 mg/kg
- DOES NOT EXCEED UUSCO'S
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- APPROXIMATE SITE BOUNDARY

***NOTES:***
1. ALL SAMPLES ARE BELOW RESTRICTED USE (INDUSTRIAL SCOs).

***SOURCE:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 300 600
SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

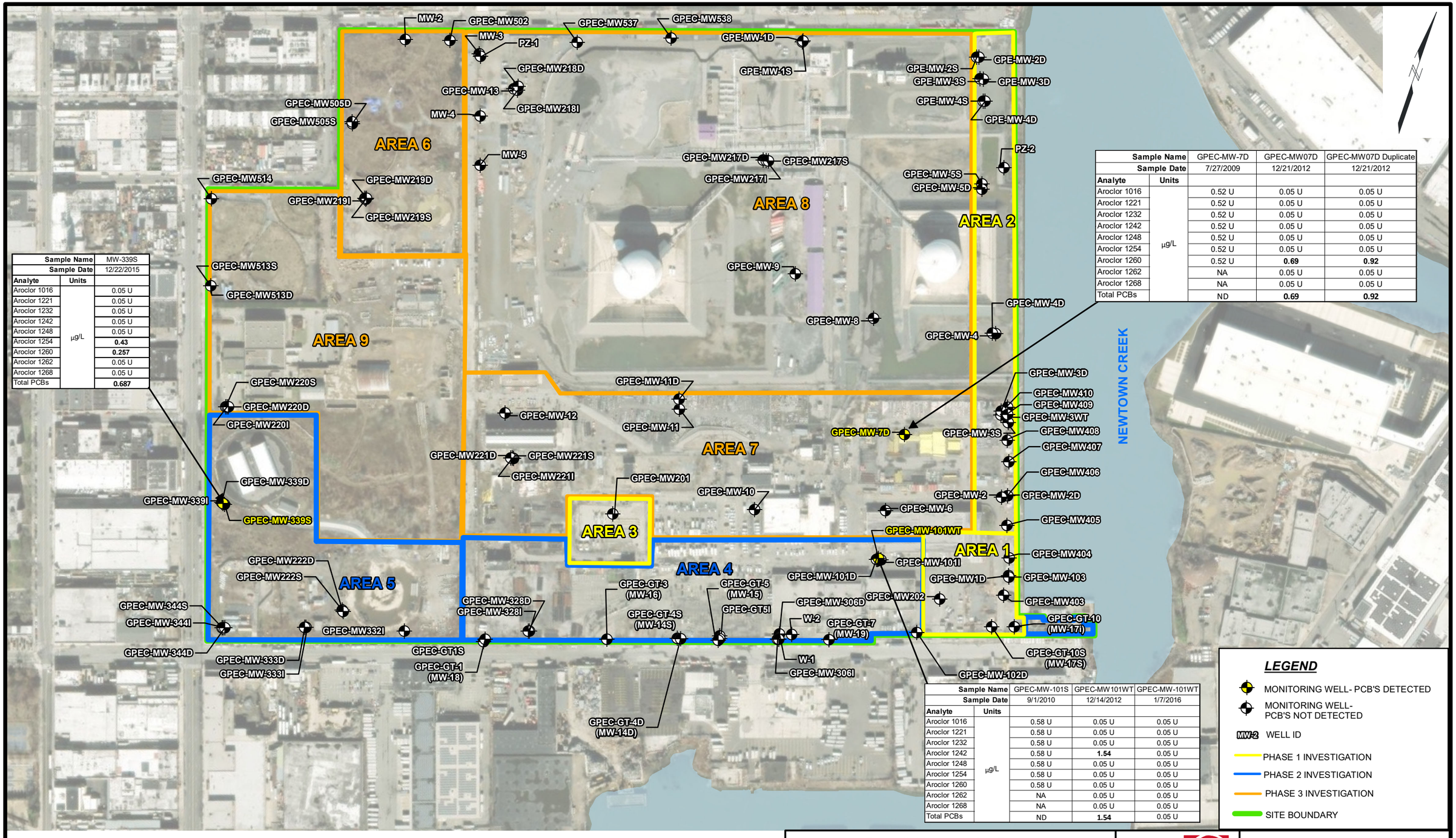
nationalgrid

GEI Consultants

SOIL PCB EXCEEDANCES OF THE UUSCO'S

Project 125180 | June 2026 | Fig. 32

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Total_PCB_Exceedances_250409.mxd




| Sample Name | | MW-339S |
|---|---|---|
| Sample Date | | 12/22/2015 |
| Analyte | Units | |
| Aroclor 1016 | µg/L | 0.05 U |
| Aroclor 1221 | | 0.05 U |
| Aroclor 1232 | | 0.05 U |
| Aroclor 1242 | | 0.05 U |
| Aroclor 1248 | | 0.05 U |
| Aroclor 1254 | | **0.43** |
| Aroclor 1260 | | **0.257** |
| Aroclor 1262 | | 0.05 U |
| Aroclor 1268 | | 0.05 U |
| Total PCBs | | **0.687** |

| Sample Name | | GPEC-MW-7D | GPEC-MW07D | GPEC-MW07D Duplicate |
|---|---|---|---|---|
| Sample Date | | 7/27/2009 | 12/21/2012 | 12/21/2012 |
| Analyte | Units | | | |
| Aroclor 1016 | µg/L | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1221 | | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1232 | | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1242 | | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1248 | | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1254 | | 0.52 U | 0.05 U | 0.05 U |
| Aroclor 1260 | | 0.52 U | **0.69** | **0.92** |
| Aroclor 1262 | | NA | 0.05 U | 0.05 U |
| Aroclor 1268 | | NA | 0.05 U | 0.05 U |
| Total PCBs | | ND | **0.69** | **0.92** |

| Sample Name | | GPEC-MW-101S | GPEC-MW101WT | GPEC-MW-101WT |
|---|---|---|---|---|
| Sample Date | | 9/1/2010 | 12/14/2012 | 1/7/2016 |
| Analyte | Units | | | |
| Aroclor 1016 | µg/L | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1221 | | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1232 | | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1242 | | 0.58 U | **1.54** | 0.05 U |
| Aroclor 1248 | | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1254 | | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1260 | | 0.58 U | 0.05 U | 0.05 U |
| Aroclor 1262 | | NA | 0.05 U | 0.05 U |
| Aroclor 1268 | | NA | 0.05 U | 0.05 U |
| Total PCBs | | ND | **1.54** | 0.05 U |

***LEGEND***

- MONITORING WELL- PCB'S DETECTED
- MONITORING WELL- PCB'S NOT DETECTED
- MW-2 WELL ID
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

0 300 600

SCALE: 1" = 300'

Remedial Investigation Report
Greenpoint Energy Center
Brooklyn, New York

nationalgrid

GEI Consultants

Project 125180

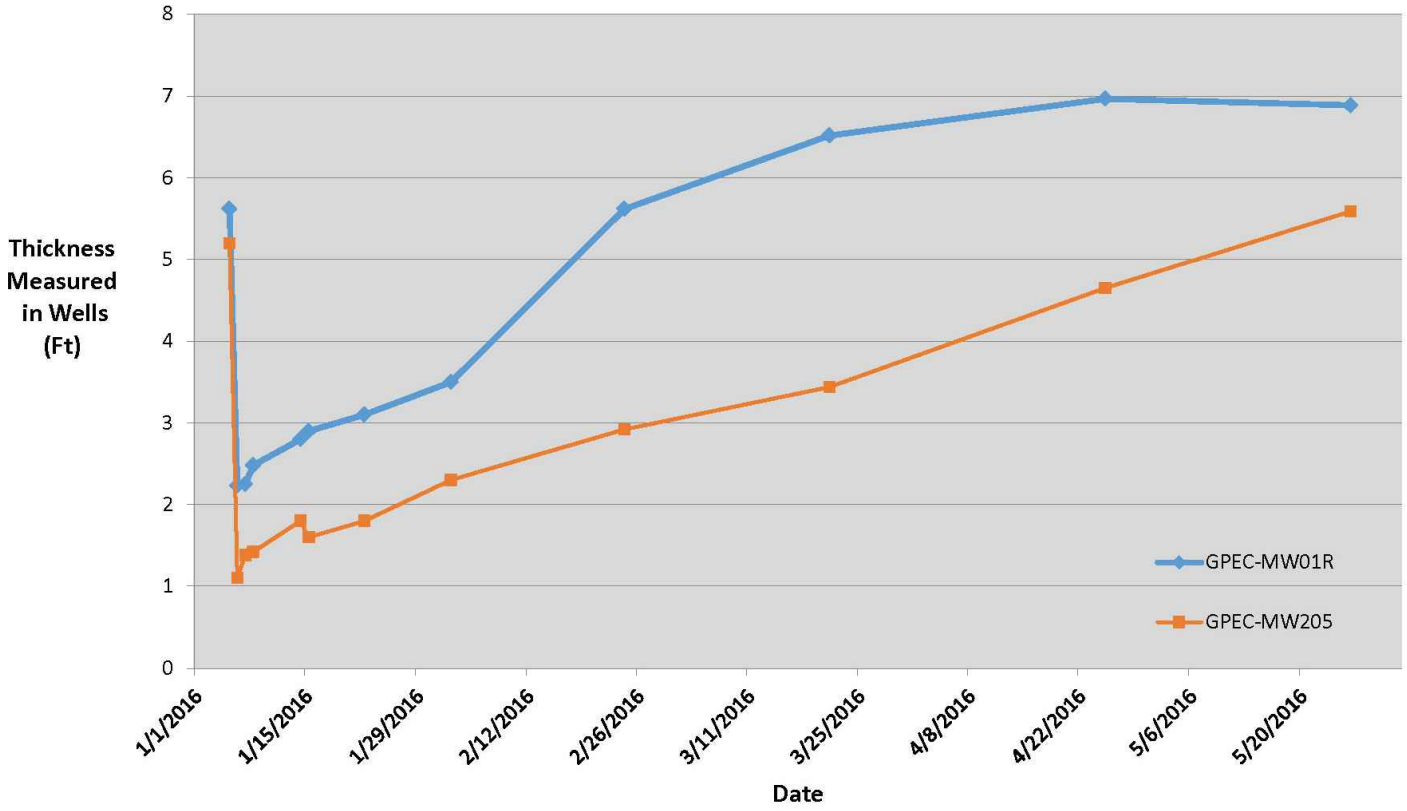
# GROUNDWATER PCB ANALYTICAL SUMMARY

June 2026

Fig. 33

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\PCBDetectionsGW_250409.mxd

## DNAPL Thickness Rebound
## In Wells GPEC-MW01R and GPEC-MW205




Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

GEI Consultants

DNAPL REBOUND GRAPH - JANUARY 2016

Project 125180 | June 2026 | Fig. 34

\\WAS1L-OJANN C:\Users\ojanney\Downloads\30 125180-RIR-DRG.dwg - 2/12/2021

# Plates

**Plate 1 Historical Structures and Remedial Investigation Areas**

**Plate 2 Previous Investigation Locations**

**Plate 3 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Areas 1, 2, 3**

**Plate 4 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 4**

**Plate 5 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 5**

**Plate 6 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 6 & 9**

**Plate 7 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 7**

**Plate 8 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 8 – West**

**Plate 9 Shallow Subsurface Soil Analytical Summary (0-25 ft bgs) Area 8 – East**

**Plate 10 Intermediate Subsurface Soil Analytical Summary (25-60 ft bgs)**

**Plate 11 Deep Subsurface Soil Analytical Summary (>60 ft bgs)**

**Plate 12 Surface Soil Analytical Summary (**

**Plate 13 Shallow Groundwater Analytical Summary RI and PDI Phases**

**Plate 14 Intermediate Groundwater Analytical Summary RI and PDI Phases**

**Plate 15 Deep Groundwater Analytical Summary RI and PDI Phases**

**Plate 16 Shallow Groundwater Analytical Summary 2024/2025 Supplemental Phase**

**Plate 17 Intermediate Groundwater Analytical Summary 2024/2025 Supplemental Phase**

**Plate 18 Deep Groundwater Analytical Summary 2024/2025 Supplemental Phase**

AREA 6
AREA 8
AREA 9
AREA 2
AREA 5
AREA 7
AREA 3
AREA 4
AREA 1
AREA 4

NEWTOWN CREEK

ENGLISH KILLS

**LEGEND**

- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- CURRENT STRUCTURES
- SITE BOUNDARY
- HISTORICAL STRUCTURES
- 1888 NEWTOWN CREEK
- HISTORICAL DRAINAGE AREA

**SOURCES:**
1. HISTORICAL FEATURES ARE APPROXIMATE BASED ON SERIES OF HISTORICAL DOCUMENTS LOCATED: \\gtlv1v-fs01\GIS\Projects\National_Grid\Greenpoint\Historical Document Inventory
2. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

HISTORICAL STRUCTURES AND REMEDIAL INVESTIGATION AREAS

June 2026 Plate 1

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Historical_Structures_250409.mxd

| ID | Source | Source Description | Year | Type of Investigation | Area |
|---|---|---|---|---|---|
| 11 | Geraghty and Miller, Inc | Underground Accumulation of Hydrocarbons | 1979 | SB, MW | GPEC |
| 12 | Brooklyn Union Gas | Borings in SNG Naphtha Tank Farm Area | 1979 | SB, MW | GPEC |
| 13 | Roux | Groundwater Contingency Plan | 1990 | SB, MW | GPEC |
| 15 | Lexicon Environmental | Greenpoint UST Site Investigation | 1993 | SB | GPEC |
| 16 | Fanning, Phillps, & Molnar | Underground Storage Tank GW Investigation | 1995 | SB, MW | GPEC |
| 17 | Groundwater Technology | Greenpoint UST Abandonment | 1994-1995 | SB, MW | GPEC |
| 19 | Vanasse Hangen Brustlin | Maspeth Holder Demo sampling (pre-,post-demolition) | 2001 | Surf Soil | GPEC |
| 21 | Miller Environmental | Greenpoint Subsurface Investigation | 2003 | SB | GPEC |
| 22 | NYSDEC | Cooper Tank & Welding Corp | 2003 | Pump Well | GPEC |
| 23 | PS&S | LNG area investigation | 2004-2005 | SB | GPEC |
| 24 | EEA, Inc. | 254 Maspeth Ave | 2004 | SB | EQ |
| 25, 26 | PS&S | LNG area investigation | 2004 | SB, MW, SV | GPEC |
| 27 | Anchor Environmental | Laurel Hill Sediment Sampling | 2004-2005 | SED | LH |
| 28 | Gannett Fleming, Inc. | 252 Maspeth Ave (Equity) | 2005 | SB, MW | EQ |
| 30 | PS&S | LNG area investigation | 2006 | SB | GPEC |
| 31 | Gannett Fleming, Inc. | 252-254 Maspeth Ave.(Equity) | 2006 | SB, MW | GPEC |
| 32 | PS&S | LNG area investigation | 2007 | SB | GPEC |
| 33 | GEI Consultants | Bulkhead Soil Investigation-South Fireboad Manifold | 2008 | SB | GPEC |
| 38 | GEI Consultants | Ballfield Investigation | 2010 | Surf Soil | GPEC |
| 43 | Malcolm Pirnie | BCF Oil Site - Ditmas, Maspeth Ave | Unkn | SB, MW | BCF |
| 44 | Malcolm Pirnie | BCF Oil Site - BCF Oil, Maspeth Ave | Unkn | SB, MW | BCF |
| 45 | AECOM | Equity Site, 252 Maspeth Ave | 2009 | SB, MW | EQ |
| 46 | Miller Environmental | Surface Soil Investigation along Maspeth Ave | 2010 | Surf Soil | GPEC |
| 47 | AECOM | Equity Works Remedial Investigation | 2010 | SB | GPEC |
| 49 | CEUS Engineering, P.C./Advanced Site Restoration, LLC., | Former Gulf Oil Terminal | 2011 | MW | GOT |

Notes:
Area:
- GPEC - Greenpoint Energy Center
- LH - Laurel Hill
- EQ - Equity Site
- BCF - BCF Oil

Type of Investigation::
- SB - Soil Boring
- MW - Monitoring Well
- Surf Soil - Surface Soil Sample
- Sed - Sediment Sample
- SV - Soil Vapor Sample
- TP - Test Pit
- CPT - Cone Penetrometer Test

AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
AREA 6
AREA 7
AREA 8
AREA 9

NEWTOWN CREEK

**LEGEND**
- ACTIVE MONITORING WELL
- INACTIVE MONITORING WELL
- BORING LOCATION
- SEDIMENT LOCATION
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

SCALE: 1" = 120'

**SOURCES:**
1. FIGURE BASED ON PLAN TITLED "PROPOSED SOIL BORINGS/TEST PIT, MONITORING WELL AND SOIL GAS SAMPLE LOCATION SITE PLAN," BY PAULUS SOKOLOWSKI AND SARTOR ENGINEERING, PC DATED OCT 2004.
2. SURVEY OF EXISTING MONITORING WELLS CONDUCTED BY GEI ON 6-16-09.
3. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New Yor

nationalgrid

PROJECT 125180

GEI Consultants

PREVIOUS INVESTIGATION LOCATIONS

June 2026

Plate 2

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\PreviousLocations_v3_250409.mxd

| Analyte | 6 NYCRR Part 375 SCO Restricted Use PGW | 6 NYCRR 375 SCO RESTRICTED USE IND |
|---|---|---|
| **BTEX (mg/kg)** | | |
| Benzene | 0.06 | 89 |
| Toluene | 0.7 | 1000 |
| Ethylbenzene | 1 | 780 |
| Total Xylene | 1.6 | 1000 |
| Total BTEX | NE | NE |
| **Other VOCs (mg/kg)** | | |
| Acetone | 0.05 | 1000 |
| Carbon disulfide | 2.7 | NE |
| Methylene chloride | 0.05 | 1000 |
| Total VOCs | NE | NE |
| **PAHs (mg/kg)** | NE | |
| Acenaphthene | 98 | 1000 |
| Acenaphthylene | 107 | 1000 |
| Anthracene | 1000 | 1000 |
| Fluoranthene | 1000 | 1000 |
| Fluorene | 386 | 1000 |
| 2-Methylnaphthalene | 36.4 | NE |
| Naphthalene | 12 | 1000 |
| Phenanthrene | 1000 | 1000 |
| Pyrene | 1000 | 1000 |
| Benz[a]anthracene | 1 | 11 |
| Benzo[a]pyrene | 22 | 1.1 |
| Benzo[b]fluoranthene | 1.7 | 11 |
| Benzo[k]fluoranthene | 1.7 | 110 |
| Chrysene | 1 | 110 |
| Dibenz[a,h]anthracene | 1000 | 1.1 |
| Indeno[1,2,3-cd]pyrene | 8.2 | 11 |
| Total PAHs | NE | NE |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | 6.2 | 1000 |
| 4-Methylphenol (p-Cresol) | 0.33 | 1000 |
| Nitrobenzene | 0.17 | NE |
| Phenol | 0.33 | 1000 |
| **Metals (mg/kg)** | | |
| Arsenic | 16 | 16 |
| Barium | 820 | 10000 |
| Beryllium | 47 | 2700 |
| Cadmium | 7.5 | 60 |
| Copper | 1720 | 10000 |
| Lead | 450 | 3900 |
| Manganese | 2000 | 10000 |
| Mercury | 0.73 | 5.7 |
| Nickel | 130 | 10000 |
| Selenium | 4 | 6800 |

| Sample Name | GPEC-SB213 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 7/18/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.62** |
| Benzo[a]pyrene | **3.33** |
| Benzo[b]fluoranthene | **3.5** |
| Benzo[k]fluoranthene | **2.17** |
| Chrysene | **2.81** |
| Total PAHs | **29.801** |
| **Metals (mg/kg)** | |
| Arsenic | **44.7** |
| Selenium | **8.83** |

| Sample Name | GPEC-SB214 (7-8) |
|---|---|
| Start Depth (ft.) | 7 |
| End Depth (ft.) | 8 |
| Sample Date | 7/14/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.153** |
| Total BTEX | **0.729** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.78** |
| Benzo[a]pyrene | **4.01** |
| Benzo[b]fluoranthene | **2.51** |
| Benzo[k]fluoranthene | **2.54** |
| Chrysene | **4.19** |
| Total PAHs | **51.631** |
| **Metals (mg/kg)** | |
| Arsenic | **63.6** |
| Beryllium | **67** |
| Cadmium | **62.9** |
| Selenium | **63.6** |

| Sample Name | GPEC-SB215 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 7/2/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | **0.272** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.66** |
| Benzo[a]pyrene | **5.11** |
| Benzo[b]fluoranthene | **3.2** |
| Benzo[k]fluoranthene | **3.85** |
| Chrysene | **4.53** |
| Total PAHs | **49.694** |
| **Metals (mg/kg)** | |
| Mercury | **1.65 J** |

| Sample Name | GPEC-SB216 (4-5) | GPEC-SB216 (7-8) |
|---|---|---|
| Start Depth (ft.) | 4 | 7 |
| End Depth (ft.) | 5 | 8 |
| Sample Date | 7/2/2012 | 7/15/2012 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | 0.0061 U | **1.64 J** |
| Total BTEX | ND | **1.64** |
| **PAHs (mg/kg)** | | |
| Acenaphthene | **0.037 J** | **111** |
| 2-Methylnaphthalene | **0.065** | **206** |
| Naphthalene | **0.111** | **314** |
| Benz[a]anthracene | **0.953** | **26.4** |
| Benzo[a]pyrene | **1.24** | **24** |
| Benzo[b]fluoranthene | **0.711** | **10.8** |
| Benzo[k]fluoranthene | **0.674** | **11** |
| Chrysene | **1.03** | **25.6** |
| Dibenz[a,h]anthracene | **0.161** | **2.27 J** |
| Total PAHs | **9.808** | **1172.2** |
| **Metals (mg/kg)** | | |
| Arsenic | **5.11** | **23.3** |
| Selenium | 2.66 U | **5.06** |

| Sample Name | GPEC-SB202 (22-23) |
|---|---|
| Start Depth (ft.) | 22 |
| End Depth (ft.) | 23 |
| Sample Date | 11/12/2011 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | **0.0933** |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.74 J** |
| Methylene chloride | **0.29 J** |
| **PAHs (mg/kg)** | |
| Total PAHs | ND |
| **Other SVOCs (mg/kg)** | |
| 4-Methylphenol (p-Cresol) | **5.1 J** |
| Phenol | **1 J** |

| Sample Name | GPEC-TP203B (4.5-5) |
|---|---|
| Start Depth (ft.) | 4.5 |
| End Depth (ft.) | 5 |
| Sample Date | 8/9/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.41** |
| Benzo[a]pyrene | **1.72** |
| Chrysene | **1.54** |
| Total PAHs | **17.49** |
| **Metals (mg/kg)** | |
| Mercury | **1.34** |

| Sample Name | GPEC-SB-5 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 4/13/2009 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.6** |
| Benzo[a]pyrene | **4.1** |
| Benzo[b]fluoranthene | **4.1** |
| Benzo[k]fluoranthene | **1.7** |
| Chrysene | **3.8** |
| Total PAHs | **52.69** |

| Sample Name | GPEC-SB212 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 7/2/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **32.8** |
| Toluene | **71.5** |
| Ethylbenzene | **14.2** |
| Total Xylene | **133** |
| Total BTEX | **251.5** |
| **PAHs (mg/kg)** | |
| Acenaphthene | **100** |
| Acenaphthylene | **481** |
| Fluorene | **629** |
| 2-Methylnaphthalene | **1180** |
| Naphthalene | **1890** |
| Phenanthrene | **1820** |
| Benz[a]anthracene | **451** |
| Benzo[a]pyrene | **445** |
| Benzo[b]fluoranthene | **203** |
| Benzo[k]fluoranthene | **242** |
| Chrysene | **538** |
| Dibenz[a,h]anthracene | **51.2** |
| Indeno[1,2,3-cd]pyrene | **87** |
| Total PAHs | **10442.8** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **68.8** |

| Sample Name | GPEC-SB211 (4-5) |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 7/18/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.78** |
| Benzo[a]pyrene | **3.37** |
| Benzo[b]fluoranthene | **2.32** |
| Benzo[k]fluoranthene | **2.38** |
| Chrysene | **2.85** |
| Total PAHs | **32.349** |

| Sample Name | GPEC-SB210 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 7/18/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.27** |
| Benzo[a]pyrene | **1.75** |
| Chrysene | **1.41** |
| Total PAHs | **16.134** |
| **Metals (mg/kg)** | |
| Arsenic | **20.3** |
| Lead | **988** |

| Sample Name | GPEC-SB204 (1-2) | GPEC-SB204 (19-20) |
|---|---|---|
| Start Depth (ft.) | 1 | 19 |
| End Depth (ft.) | 2 | 20 |
| Sample Date | 6/27/2012 | 7/11/2012 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | **0.04211** |
| **PAHs (mg/kg)** | | |
| Naphthalene | **2280** | **0.111 J** |
| Benzo[a]pyrene | **24.8 J** | 0.123 UU |
| Benzo[b]fluoranthene | **17.1 J** | 0.123 UU |
| Benzo[k]fluoranthene | **29.4** | 0.123 UU |
| Chrysene | **24.6 J** | 0.123 UU |
| Total PAHs | **2473.9** | **0.111** |
| **Other SVOCs (mg/kg)** | | |
| 4-Methylphenol (p-Cresol) | 28.4 U | **7.84 J** |
| **Metals (mg/kg)** | | |
| Mercury | **1.5 J** | **0.026 J** |
| Nickel | **16.8** | **18.1 J** |
| Selenium | **2.4 J** | 7.88 UU |

| Sample Name | GPEC-SB-3 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 3/30/2009 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benzo[a]pyrene | **2.9** |
| Benzo[b]fluoranthene | **4.1** |
| Chrysene | **3.2** |
| Total PAHs | 37.3 |
| Phenol | 0.33 U |

| Sample Name | GPEC-TP205 (7.5-8) |
|---|---|
| Start Depth (ft.) | 7.5 |
| End Depth (ft.) | 8 |
| Sample Date | 8/13/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.38** |
| Benzo[a]pyrene | **4.23** |
| Benzo[b]fluoranthene | **3.16** |
| Benzo[k]fluoranthene | **3.02** |
| Chrysene | **3.43** |
| Total PAHs | **41.204** |
| **Metals (mg/kg)** | |
| Mercury | **0.746** |

| Sample Name | GPEC-SB-105 (4-5) |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 5/17/2010 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.71** |
| Benzo[a]pyrene | **1.83** |
| Chrysene | **1.53** |
| Total PAHs | **18.3991** |

| Sample Name | GPEC-SB118 (0-2) | GPEC-SB118 (5-6) | GPEC-XX042611 |
|---|---|---|---|
| Start Depth (ft.) | 0 | 5 | 0 |
| End Depth (ft.) | 2 | 6 | 2 |
| Sample Date | 4/26/2011 | 4/26/2011 | 4/26/2011 |
| **Analyte** | | | |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **0.75 J** | **1.0** | **22 J** |
| Benzo[a]pyrene | **0.88 J** | **1.3** | **23 J** |
| Benzo[b]fluoranthene | **0.94 J** | **1.3** | **24 J** |
| Benzo[k]fluoranthene | **0.4 J** | **0.57** | **10 J** |
| Chrysene | **0.87 J** | **1.2** | **21 J** |
| Dibenz[a,h]anthracene | **0.14** | **0.11** | **3.2** |
| Indeno[1,2,3-cd]pyrene | **0.66 J** | **0.83** | **15 J** |
| **Metals (mg/kg)** | | | |
| Arsenic | **6.4** | **19** | **6.7** |
| Copper | **267** | **2210** | **286** |
| Lead | **534** | **1010** | **462** |
| Mercury | **0.76** | **2.1** | **0.96** |

| Sample Name | GPEC-SB116 (0-2) | GPEC-SB116 (5-6) |
|---|---|---|
| Start Depth (ft.) | 0 | 5 |
| End Depth (ft.) | 2 | 6 |
| Sample Date | 4/26/2011 | 4/26/2011 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.0024** | **0.07** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **0.32** | **2.9** |
| Benzo[a]pyrene | **0.37** | **2.7** |
| Benzo[b]fluoranthene | **0.4** | **3.2** |
| Chrysene | **0.32 J** | **3** |
| **Metals (mg/kg)** | | |
| Barium | **122** | **1390** |
| Lead | **124** | **499** |
| Mercury | **0.28** | **0.94** |

| Sample Name | GPEC-GT-23 (3-4) | GPEC-GT-XX |
|---|---|---|
| Start Depth (ft.) | 3 | 3 |
| End Depth (ft.) | 4 | 4 |
| Sample Date | 10/7/2009 | 10/7/2009 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **13** | **13** |
| Toluene | **28** | **33** |
| Ethylbenzene | **11** | **8 J** |
| Total Xylene | **65** | **76** |
| Total BTEX | **117** | **127** |
| **PAHs (mg/kg)** | | |
| Acenaphthylene | **3300 J** | **1500 J** |
| Anthracene | **4300 J** | **2000 J** |
| Fluoranthene | **7000 J** | **3600 J** |
| Fluorene | **4800 J** | **2300 J** |
| 2-Methylnaphthalene | **4100 J** | **2000 J** |
| Naphthalene | **14000 J** | **6800 J** |
| Phenanthrene | **11000 J** | **5900 J** |
| Pyrene | **4700 J** | **2300 J** |
| Benz[a]anthracene | **2900 J** | **1500 J** |
| Benzo[a]pyrene | **2400 J** | **1200 J** |
| Benzo[b]fluoranthene | **2700 J** | **1500 J** |
| Benzo[k]fluoranthene | **1200** | **610 J** |
| Chrysene | **2600 J** | **1300 J** |
| Dibenz[a,h]anthracene | **250 J** | **140 J** |
| Indeno[1,2,3-cd]pyrene | **1000** | **460 J** |
| Total PAHs | **67350** | **33600** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **2900 J** | **1500 J** |
| 4-Methylphenol (p-Cresol) | **140 J** | **63 J** |
| Nitrobenzene | **800 U** | **700 U** |
| Phenol | **100 J** | **700 U** |
| **Metals (mg/kg)** | | |
| Arsenic | **6.9** | **16.3 J** |
| Lead | **171 J** | **500 J** |

| Sample Name | GPEC-GT-9 (8) |
|---|---|
| Start Depth (ft.) | 8 |
| End Depth (ft.) | 8 |
| Sample Date | 8/10/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.7** |
| Benzo[a]pyrene | **1.8** |
| Benzo[b]fluoranthene | **2.2** |
| Chrysene | **1.8** |
| **Metals (mg/kg)** | |
| Arsenic | **23** |
| Lead | **854 J** |
| Mercury | **0.97** |

| Sample Name | GPEC-SB205 (6-7) |
|---|---|
| Start Depth (ft.) | 6 |
| End Depth (ft.) | 7 |
| Sample Date | 6/28/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Total PAHs | **9.93** |
| **Metals (mg/kg)** | |
| Lead | **591** |
| Mercury | **0.968 J** |

| Sample Name | GPEC-SB-104 (4-5) |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 5/17/2010 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total BTEX | ND |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.79** |
| Benzo[a]pyrene | **2.44** |
| Benzo[b]fluoranthene | **2.2** |
| Benzo[k]fluoranthene | **2.21** |
| Chrysene | **2.55** |
| Total PAHs | **31.072** |

**LEGEND**

- BORING LOCATION
- TEST PIT

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/ SULFER-LIKE ODOR
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

**SOURCES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

**NOTE:**
1. ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND.
2. SOIL EXCEEDANCES IN AREA 3 WERE REMOVED DURING THE EXCAVATION FOR THE MASPETH REGULATOR STATION.

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

SHALLOW SUBSURFACE SOIL ANALYTICAL SUMMARY (0-25 FT BGS) AREAS 1,2,3

June 2026

Plate 3

E:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Soil Analytical Shallow Bulkhead_240808_250409.mxd

| Analyte | 6 NYCRR Part 375 SCO RESTRICTED USE PGW | 6 NYCRR 375 SCO RESTRICTED USE IND |
|---|---|---|
| **BTEX (mg/kg)** | | |
| Benzene | 0.06 | 89 |
| Toluene | 0.7 | 1000 |
| Ethylbenzene | 1 | 780 |
| Total Xylene | 1.6 | 1000 |
| Total BTEX | NE | NE |
| **Other VOCs (mg/kg)** | | |
| Acetone | 0.05 | 1000 |
| 1,1,Dichloroethane | 0.27 | 480 |
| Methylene chloride | 0.05 | 1000 |
| 1,2,4,Trichlorobenzene | 3.4 | NE |
| Total VOCs | NE | NE |
| **PAHs (mg/kg)** | | |
| Acenaphthylene | 107 | 1000 |
| 2-Methylnaphthalene | 36.4 | NE |
| Naphthalene | 12 | 1000 |
| Benz[a]anthracene | 1 | 11 |
| Benzo[a]pyrene | 22 | 1.1 |
| Benzo[b]fluoranthene | 1.7 | 11 |
| Benzo[k]fluoranthene | 1.7 | 110 |
| Chrysene | 1 | 110 |
| Dibenz[a,h]anthracene | 1000 | 1.1 |
| Indeno[1,2,3-cd]pyrene | 8.2 | 11 |
| Total PAHs | NE | NE |
| **Other SVOCs (mg/kg)** | | |
| Aniline | 0.33 | 1000 |
| Dibenzofuran | 6.2 | 1000 |
| 2-Methylphenol (o-Cresol) | 0.33 | 1000 |
| 4-Methylphenol (p-Cresol) | 0.33 | 1000 |
| Phenol | 0.33 | 1000 |
| Total SVOCs | NE | NE |
| **Metals (mg/kg)** | | |
| Arsenic | 16 | 16 |
| Barium | 820 | 10000 |
| Cadmium | 7.5 | 60 |
| Copper | 1720 | 10000 |
| Lead | 450 | 3900 |
| Manganese | 2000 | 10000 |
| Mercury | 0.73 | 5.7 |
| Selenium | 4 | 6800 |
| Silver | 8.3 | 6800 |
| Zinc | 2480 | 10000 |

| Sample Name | GPEC-SB/PZ346 | GPEC-SB346 (18.5-19.5) |
|---|---|---|
| Start Depth (ft.) | 5.5 | 18.5 |
| End Depth (ft.) | 6 | 19.5 |
| Sample Date | 3/12/2015 | 4/8/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **1.65** | **0.04 J** |
| Benzo[a]pyrene | **2.01** | 0.06 U |
| Benzo[b]fluoranthene | **2.1** | 0.06 U |
| Chrysene | **1.94** | **0.04 J** |
| Total PAHs | 21.073 | **0.43** |
| **Metals (mg/kg)** | | |
| Arsenic | **6.69** | **18.9** |
| Cadmium | **0.692** | **13.6** |
| Mercury | **0.656** | **0.901** |
| Zinc | **273** | **10300** |

| Sample Name | GPEC-SB/PZ314 | GPEC-SB314 (12-13) |
|---|---|---|
| Start Depth (ft.) | 5 | 12 |
| End Depth (ft.) | 5.5 | 13 |
| Sample Date | 3/12/2015 | 4/7/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.00389 DJ** | **0.916 D** |
| Total BTEX | **0.00389** | 1.393 |
| **PAHs (mg/kg)** | | |
| Naphthalene | **0.275** | **30.5 D** |
| Benz[a]anthracene | **1.67** | **0.446 D** |
| Benzo[a]pyrene | **1.92** | **0.274 D** |
| Benzo[b]fluoranthene | **2.03** | **0.353 D** |
| Chrysene | **1.84** | **0.545 D** |
| Total PAHs | 20.951 | 83.189 |
| **Metals (mg/kg)** | | |
| Lead | **935** | **27.7** |
| Mercury | **31.7 D** | **0.148** |

| Sample Name | GPEC-SB315 | GPEC-SB315 (22-23) |
|---|---|---|
| Start Depth (ft.) | 4 | 22 |
| End Depth (ft.) | 4.5 | 23 |
| Sample Date | 3/13/2015 | 4/8/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.00519 DJ** | **0.303 DJ** |
| Ethylbenzene | **0.00201 DJ** | **4.32 D** |
| Total Xylene | 0.011 U | **1.88 D** |
| Total BTEX | **0.0072** | **6.503** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.329 D** | **39.7 D** |
| Naphthalene | **1.57 D** | **97.4 D** |
| Benz[a]anthracene | **4.62 D** | **0.841 D** |
| Benzo[a]pyrene | **4.9 D** | **0.533 D** |
| Benzo[b]fluoranthene | **5.2 D** | **0.465 D** |
| Benzo[k]fluoranthene | **3.94 D** | **0.394 D** |
| Chrysene | **4.77 D** | **0.786 D** |
| Total PAHs | **56.303** | **173.968** |
| **Metals (mg/kg)** | | |
| Mercury | **1.97** | 0.007 U |

| Sample Name | GPEC-SB321 (1-1.5) | GPEC-SB321 (12-13) |
|---|---|---|
| Start Depth (ft.) | 1 | 12 |
| End Depth (ft.) | 1.5 | 13 |
| Sample Date | 3/16/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.165 DJ** | 0.00908 U |
| Total BTEX | **0.778** | ND |
| **PAHs (mg/kg)** | | |
| Naphthalene | **12.9 D** | 0.041 U |
| Benz[a]anthracene | **11.6 D** | **0.335** |
| Benzo[a]pyrene | **13.1 D** | **0.288** |
| Benzo[b]fluoranthene | **13.1 D** | **0.291** |
| Benzo[k]fluoranthene | **9.43 D** | **0.266** |
| Chrysene | **14.7 D** | **0.397** |
| Dibenz[a,h]anthracene | **2.3 D** | **0.052** |
| Total PAHs | **188.697** | **3.946** |
| **Metals (mg/kg)** | | |
| Mercury | **1.01** | **0.11** |

| Sample Name | GPEC-SB/PZ322 (5-5.5) | GPEC-SB/PZ322 (13.5-14.5) |
|---|---|---|
| Start Depth (ft.) | 5 | 13.5 |
| End Depth (ft.) | 5.5 | 14.5 |
| Sample Date | 3/24/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **8.04 D** | 0.037 U |
| Benzo[a]pyrene | **9.13 D** | 0.037 U |
| Benzo[b]fluoranthene | **9.08 D** | 0.037 U |
| Benzo[k]fluoranthene | **6.83 D** | 0.037 U |
| Chrysene | **7.49 D** | 0.037 U |
| Dibenz[a,h]anthracene | **1.66 D** | 0.037 U |
| Total PAHs | **102.469** | ND |
| **Metals (mg/kg)** | | |
| Lead | **1060** | **2.6** |
| Mercury | **1.45** | **0.011** |

| Sample Name | GPEC-TP304-305A |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 3.5 |
| Sample Date | 10/15/2014 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.15 DJ** |
| Total BTEX | **0.672** |
| **PAHs (mg/kg)** | |
| Acenaphthylene | **132 D** |
| 2-Methylnaphthalene | **133 D** |
| Naphthalene | **297 D** |
| Benz[a]anthracene | **134 D** |
| Benzo[a]pyrene | **99.6 D** |
| Benzo[b]fluoranthene | **86.5 D** |
| Benzo[k]fluoranthene | **64.3 D** |
| Chrysene | **111 D** |
| Dibenz[a,h]anthracene | **23 D** |
| Indeno[1,2,3-cd]pyrene | **49.2 D** |
| Total PAHs | **2911.1** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **119 D** |
| 2-Methylphenol (o-Cresol) | **3.5 D** |
| 4-Methylphenol (p-Cresol) | **9.82 D** |
| Phenol | **0.59 D** |

| Sample Name | GPEC-TP303A | GPEC-TP303A | GPEC-TP303B |
|---|---|---|---|
| Start Depth (ft.) | 3.5 | 4 | 9 |
| End Depth (ft.) | 4 | 4 | 9.5 |
| Sample Date | 10/14/2014 | 10/14/2014 | 10/14/2014 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | **0.01315** |
| **Other VOCs (mg/kg)** | | | |
| Acetone | 0.027 U | 0.027 U | **0.655 D** |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **4.79 D** | **5.35 D** | **5.6 D** |
| Benzo[a]pyrene | **4.27 D** | **3.99 D** | **3.45 D** |
| Benzo[b]fluoranthene | **3.43 D** | **3.95 D** | **3.11 D** |
| Benzo[k]fluoranthene | **2.19 D** | **2.66** | **2.15 D** |
| Chrysene | **4.44 D** | **4.38 D** | **3.65 D** |
| Total PAHs | **54.635** | **59.469** | **70.019** |
| **Metals (mg/kg)** | | | |
| Arsenic | **4.04** | **3.2** | **160** |
| Mercury | **1.39** | **0.509** | **2.07** |

| Sample Name | GPEC-SB/PZ323 (5-5.5) | GPEC-SB/PZ323 (13.5-14.5) |
|---|---|---|
| Start Depth (ft.) | 5 | 13.5 |
| End Depth (ft.) | 5.5 | 14.5 |
| Sample Date | 3/19/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **2.42** | **0.11** |
| Benzo[a]pyrene | **2.61** | **0.095** |
| Benzo[b]fluoranthene | **2.87** | **0.099** |
| Benzo[k]fluoranthene | **2.32** | **0.067** |
| Chrysene | **2.28** | **0.103** |
| Total PAHs | **26.039** | **1.166** |
| **Metals (mg/kg)** | | |
| Mercury | **1.05** | **0.023** |

| Sample Name | GPEC-TP311A | GPEC-TP311B |
|---|---|---|
| Start Depth (ft.) | 2.5 | 7.5 |
| End Depth (ft.) | 3 | 8 |
| Sample Date | 9/29/2014 | 9/29/2014 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **3.92** | **7.56** |
| Benzo[a]pyrene | **3.78** | **5.68** |
| Benzo[b]fluoranthene | **4.34** | **6.02** |
| Benzo[k]fluoranthene | **2.8** | **3.48** |
| Chrysene | **4.32** | **7.25** |
| Dibenz[a,h]anthracene | **1.54** | **1.99** |
| Total PAHs | **46.868** | **84.661** |
| **Metals (mg/kg)** | | |
| Lead | **955** | **1150** |
| Mercury | **1.78** | **3.41 J** |

| Sample Name | GPEC-SB/PZ329 (5-5.5) | GPEC-SB/PZ329 (7-8) | GPEC-SB/PZ329 (24-25) |
|---|---|---|---|
| Start Depth (ft.) | 5 | 7 | 24 |
| End Depth (ft.) | 5.5 | 8 | 25 |
| Sample Date | 3/2/2015 | 4/2/2015 | 4/2/2015 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | ND |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | 0.046 U | **10.8 D** | **0.069** |
| Benzo[a]pyrene | 0.046 U | **10.4 D** | **0.045 J** |
| Benzo[b]fluoranthene | 0.046 U | **7.71 D** | **0.045 J** |
| Benzo[k]fluoranthene | 0.046 U | **6.5 D** | **0.037 J** |
| Chrysene | 0.046 U | **13 D** | **0.081** |
| Dibenz[a,h]anthracene | 0.046 U | **1.86 D** | 0.053 U |
| Total PAHs | **0.069** | **114.186** | **1.364** |
| **Other SVOCs (mg/kg)** | | | |
| 4-Methylphenol (p-Cresol) | 0.046 U | **0.337 D** | 0.053 U |
| **Metals (mg/kg)** | | | |
| Arsenic | **107** | **26** | **11.4** |
| Barium | **2510** | **327** | **281** |
| Copper | **889** | **2360** | **164** |
| Lead | **2630** | **6560** | **1050** |
| Manganese | **1300** | **10400** | **551** |
| Mercury | **1.29** | **2.07** | **0.344** |
| Selenium | **3.7** | **7.95** | **2.53** |
| Zinc | **1510** | **3280** | **702** |

| Sample Name | GPEC-SB/PZ320 (5-5.5) | GPEC-SB/PZ320 (15-17) | GPEC-SB/PZ002 (15-17) |
|---|---|---|---|
| Start Depth (ft.) | 5 | 15 | 15 |
| End Depth (ft.) | 5.5 | 17 | 17 |
| Sample Date | 3/3/2015 | 4/3/2015 | 4/3/2015 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | **0.00424** |
| **Other VOCs (mg/kg)** | | | |
| Methylene chloride | 0.014 U | **0.073 CD** | **0.069 CD** |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **1.22** | 0.086 U | **0.082 J** |
| Benzo[a]pyrene | **1.33** | 0.086 U | **0.091** |
| Chrysene | **1.34** | 0.086 U | **0.088** |
| Total PAHs | **15.894** | **0.499** | **1.573** |
| **Metals (mg/kg)** | | | |
| Arsenic | **133** | **22.8** | **11** |
| Copper | **2700** | **377** | **402** |
| Lead | **16700** | **1260** | **497** |
| Mercury | **5.77 D** | **0.776** | **0.233** |

| Sample Name | GPEC-SB/PZ309 (5-5.5) | GPEC-SB/PZ309 (8.5-9.5) | GPEC-SB/PZ309 (15-17) |
|---|---|---|---|
| Start Depth (ft.) | 5.5 | 8.5 | 15 |
| End Depth (ft.) | 5.5 | 9.5 | 17 |
| Sample Date | 3/3/2015 | 4/3/2015 | 4/3/2015 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | **0.0355** |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **2.67** | **0.499** | **0.818** |
| Benzo[a]pyrene | **2.68** | **0.567** | **1.02** |
| Benzo[b]fluoranthene | **2.81** | **0.542** | **0.927** |
| Benzo[k]fluoranthene | **2.03** | **0.465** | **0.975** |
| Chrysene | **3.75** | **0.51** | **1.06** |
| Total PAHs | **33.863** | **7.14** | **12.78** |
| **Other SVOCs (mg/kg)** | | | |
| 4-Methylphenol (p-Cresol) | 0.074 U | 0.038 U | **0.433** |
| **Metals (mg/kg)** | | | |
| Arsenic | **11.4** | **9.8** | **35.1** |
| Lead | **697** | **79.4** | **801** |
| Mercury | **8.38 D** | **0.399** | **11.4** |
| Selenium | **2.11** | **1.47** | **7.46** |

| Sample Name | GPEC-SB/PZ346 | GPEC-SB346 (18.5-19.5) |
|---|---|---|
| Start Depth (ft.) | 5.5 | 18.5 |
| End Depth (ft.) | 6 | 19.5 |
| Sample Date | 3/12/2015 | 4/8/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **1.65** | **0.04 J** |
| Benzo[a]pyrene | **2.01** | 0.06 U |
| Benzo[b]fluoranthene | **2.1** | 0.06 U |
| Chrysene | **1.94** | **0.04 J** |
| Total PAHs | 21.073 | **0.43** |
| **Metals (mg/kg)** | | |
| Arsenic | **6.69** | **18.9** |
| Cadmium | **0.692** | **13.6** |
| Mercury | **0.656** | **0.901** |
| Zinc | **273** | **10300** |

| Sample Name | GPEC-SB/PZ314 | GPEC-SB314 (12-13) |
|---|---|---|
| Start Depth (ft.) | 5 | 12 |
| End Depth (ft.) | 5.5 | 13 |
| Sample Date | 3/12/2015 | 4/7/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.00389 DJ** | **0.916 D** |
| Total BTEX | **0.00389** | 1.393 |
| **PAHs (mg/kg)** | | |
| Naphthalene | **0.275** | **30.5 D** |
| Benz[a]anthracene | **1.67** | **0.446 D** |
| Benzo[a]pyrene | **1.92** | **0.274 D** |
| Benzo[b]fluoranthene | **2.03** | **0.353 D** |
| Chrysene | **1.84** | **0.545 D** |
| Total PAHs | 20.951 | 83.189 |
| **Metals (mg/kg)** | | |
| Lead | **935** | **27.7** |
| Mercury | **31.7 D** | **0.148** |

| Sample Name | GPEC-SB315 | GPEC-SB315 (22-23) |
|---|---|---|
| Start Depth (ft.) | 4 | 22 |
| End Depth (ft.) | 4.5 | 23 |
| Sample Date | 3/13/2015 | 4/8/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.00519 DJ** | **0.303 DJ** |
| Ethylbenzene | **0.00201 DJ** | **4.32 D** |
| Total Xylene | 0.011 U | **1.88 D** |
| Total BTEX | **0.0072** | **6.503** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.329 D** | **39.7 D** |
| Naphthalene | **1.57 D** | **97.4 D** |
| Benz[a]anthracene | **4.62 D** | **0.841 D** |
| Benzo[a]pyrene | **4.9 D** | **0.533 D** |
| Benzo[b]fluoranthene | **5.2 D** | **0.465 D** |
| Benzo[k]fluoranthene | **3.94 D** | **0.394 D** |
| Chrysene | **4.77 D** | **0.786 D** |
| Total PAHs | **56.303** | **173.968** |
| **Metals (mg/kg)** | | |
| Mercury | **1.97** | 0.007 U |

| Sample Name | GPEC-SB321 (1-1.5) | GPEC-SB321 (12-13) |
|---|---|---|
| Start Depth (ft.) | 1 | 12 |
| End Depth (ft.) | 1.5 | 13 |
| Sample Date | 3/16/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.165 DJ** | 0.00908 U |
| Total BTEX | **0.778** | ND |
| **PAHs (mg/kg)** | | |
| Naphthalene | **12.9 D** | 0.041 U |
| Benz[a]anthracene | **11.6 D** | **0.335** |
| Benzo[a]pyrene | **13.1 D** | **0.288** |
| Benzo[b]fluoranthene | **13.1 D** | **0.291** |
| Benzo[k]fluoranthene | **9.43 D** | **0.266** |
| Chrysene | **14.7 D** | **0.397** |
| Dibenz[a,h]anthracene | **2.3 D** | **0.052** |
| Total PAHs | **188.697** | **3.946** |
| **Metals (mg/kg)** | | |
| Mercury | **1.01** | **0.11** |

| Sample Name | GPEC-SB/PZ322 (5-5.5) | GPEC-SB/PZ322 (13.5-14.5) |
|---|---|---|
| Start Depth (ft.) | 5 | 13.5 |
| End Depth (ft.) | 5.5 | 14.5 |
| Sample Date | 3/24/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **8.04 D** | 0.037 U |
| Benzo[a]pyrene | **9.13 D** | 0.037 U |
| Benzo[b]fluoranthene | **9.08 D** | 0.037 U |
| Benzo[k]fluoranthene | **6.83 D** | 0.037 U |
| Chrysene | **7.49 D** | 0.037 U |
| Dibenz[a,h]anthracene | **1.66 D** | 0.037 U |
| Total PAHs | **102.469** | ND |
| **Metals (mg/kg)** | | |
| Lead | **1060** | **2.6** |
| Mercury | **1.45** | **0.011** |

| Sample Name | GPEC-TP304-305A |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 3.5 |
| Sample Date | 10/15/2014 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.15 DJ** |
| Total BTEX | **0.672** |
| **PAHs (mg/kg)** | |
| Acenaphthylene | **132 D** |
| 2-Methylnaphthalene | **133 D** |
| Naphthalene | **297 D** |
| Benz[a]anthracene | **134 D** |
| Benzo[a]pyrene | **99.6 D** |
| Benzo[b]fluoranthene | **86.5 D** |
| Benzo[k]fluoranthene | **64.3 D** |
| Chrysene | **111 D** |
| Dibenz[a,h]anthracene | **23 D** |
| Indeno[1,2,3-cd]pyrene | **49.2 D** |
| Total PAHs | **2911.1** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **119 D** |
| 2-Methylphenol (o-Cresol) | **3.5 D** |
| 4-Methylphenol (p-Cresol) | **9.82 D** |
| Phenol | **0.59 D** |

| Sample Name | GPEC-TP303A | GPEC-TP303A | GPEC-TP303B |
|---|---|---|---|
| Start Depth (ft.) | 3.5 | 4 | 9 |
| End Depth (ft.) | 4 | 4 | 9.5 |
| Sample Date | 10/14/2014 | 10/14/2014 | 10/14/2014 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | **0.01315** |
| **Other VOCs (mg/kg)** | | | |
| Acetone | 0.027 U | 0.027 U | **0.655 D** |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **4.79 D** | **5.35 D** | **5.6 D** |
| Benzo[a]pyrene | **4.27 D** | **3.99 D** | **3.45 D** |
| Benzo[b]fluoranthene | **3.43 D** | **3.95 D** | **3.11 D** |
| Benzo[k]fluoranthene | **2.19 D** | **2.66** | **2.15 D** |
| Chrysene | **4.44 D** | **4.38 D** | **3.65 D** |
| Total PAHs | **54.635** | **59.469** | **70.019** |
| **Metals (mg/kg)** | | | |
| Arsenic | **4.04** | **3.2** | **160** |
| Mercury | **1.39** | **0.509** | **2.07** |

| Sample Name | GPEC-SB/PZ323 (5-5.5) | GPEC-SB/PZ323 (13.5-14.5) |
|---|---|---|
| Start Depth (ft.) | 5 | 13.5 |
| End Depth (ft.) | 5.5 | 14.5 |
| Sample Date | 3/19/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **2.42** | **0.11** |
| Benzo[a]pyrene | **2.61** | **0.095** |
| Benzo[b]fluoranthene | **2.87** | **0.099** |
| Benzo[k]fluoranthene | **2.32** | **0.067** |
| Chrysene | **2.28** | **0.103** |
| Total PAHs | **26.039** | **1.166** |
| **Metals (mg/kg)** | | |
| Mercury | **1.05** | **0.023** |

| Sample Name | GPEC-SB-101A (4-5) | GPEC-SB-101B (4-5) | GPEC-SB-101C (4-5) |
|---|---|---|---|
| Start Depth (ft.) | 4 | 4 | 4 |
| End Depth (ft.) | 5 | 5 | 5 |
| Sample Date | 5/13/2010 | 5/14/2010 | 5/13/2010 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Total BTEX | ND | ND | ND |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **3.55** | **5.33** | **0.97** |
| Benzo[a]pyrene | **3.35** | **6.61** | **0.3** |
| Benzo[b]fluoranthene | **2.6** | **6.63** | **0.31** |
| Benzo[k]fluoranthene | **3.51** | **4.66** | **3.55** |
| Chrysene | **3.75** | **8.07** | **0.34** |
| Dibenz[a,h]anthracene | **0.736** | **1.64** | **0.116** |
| Total PAHs | **42.5655** | **98.433** | **73.12** |
| **Metals (mg/kg)** | | | |
| Arsenic | **14 J** | **13 J** | **34 J** |
| Barium | **930 J** | **480 J** | **440 J** |
| Copper | **270 J** | **2000 J** | **320 J** |
| Lead | **750 J** | **1200 J** | **580 J** |
| Mercury | **1** | **3.5** | **1.9** |

| Sample Name | GPEC-SB324 (5-5.5) | GPEC-SB324 (12.5-13.5) |
|---|---|---|
| Start Depth (ft.) | 5 | 12.5 |
| End Depth (ft.) | 5.5 | 13.5 |
| Sample Date | 3/24/2015 | 4/9/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **PAHs (mg/kg)** | | |
| Naphthalene | **11 D** | **0.052** |
| Benz[a]anthracene | **44.3 D** | **0.157** |
| Benzo[a]pyrene | **53 D** | **0.142** |
| Benzo[b]fluoranthene | **48.7 D** | **0.125** |
| Benzo[k]fluoranthene | **38.7 D** | **0.121** |
| Chrysene | **42.4 D** | **0.157** |
| Dibenz[a,h]anthracene | **7.93 D** | **0.027 J** |
| Indeno[1,2,3-cd]pyrene | **22 D** | **0.083** |
| Total PAHs | **607.42** | **1.889** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **11 D** | **0.034 J** |
| **Metals (mg/kg)** | | |
| Lead | **587** | **28.8** |
| Mercury | **1.76** | **0.118** |

| Sample Name | GPEC-TP316A | GPEC-TP316B |
|---|---|---|
| Start Depth (ft.) | 8 | 10 |
| End Depth (ft.) | 8.5 | 3 |
| Sample Date | 9/23/2014 | 9/23/2014 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | **0.03893** | ND |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **4.47 D** | **0.388** |
| Benzo[a]pyrene | **3.53 D** | **0.447** |
| Benzo[b]fluoranthene | **2.21 D** | **0.434** |
| Benzo[k]fluoranthene | **2.51 D** | **0.331** |
| Chrysene | **4.38 D** | **0.563** |
| Total PAHs | **50.359** | **5.823** |
| **Metals (mg/kg)** | | |
| Arsenic | **31.7** | **24.6** |
| Lead | **198** | **570** |
| Mercury | **1.67** | **44 D** |
| Selenium | **1.52** | **4.07** |
| Silver | 0.79 U | **9** |

| Sample Name | GPEC-TP317A | GPEC-TP317B |
|---|---|---|
| Start Depth (ft.) | 3 | 6 |
| End Depth (ft.) | 3.5 | 6.5 |
| Sample Date | 9/22/2014 | 9/22/2014 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Total BTEX | ND | ND |
| **Other VOCs (mg/kg)** | | |
| Methylene chloride | 0.013 U | **0.054 CD** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **1.55** | **4.32 D** |
| Benzo[a]pyrene | **1.8** | **4.56 D** |
| Benzo[b]fluoranthene | **1.39** | **3.82 D** |
| Benzo[k]fluoranthene | **1.26** | **2.96 D** |
| Chrysene | **1.7** | **4.05 D** |
| Dibenz[a,h]anthracene | **0.321** | **1.2 D** |
| Total PAHs | **18.934** | **42.678** |
| **Metals (mg/kg)** | | |
| Arsenic | **21.9** | **10.2** |
| Lead | **547** | **405** |
| Mercury | **4.28** | **5.74** |

| Sample Name | GPEC-GT-4S (8-9) | GPEC-GT-4D (3-4) |
|---|---|---|
| Start Depth (ft.) | 8 | 3 |
| End Depth (ft.) | 9 | 4 |
| Sample Date | 8/5/2009 | 8/5/2009 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.17** | **0.0069** |
| Total BTEX | **0.1702** | **0.0069** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **7.4** | **1.2** |
| Benzo[a]pyrene | **5.7** | **1.2** |
| Benzo[b]fluoranthene | **6.9** | **1.4** |
| Benzo[k]fluoranthene | **2.3** | **0.47** |
| Chrysene | **8.6** | **1.3** |
| Dibenz[a,h]anthracene | **1.2 J** | **0.23 J** |
| Total PAHs | **121.46** | **22.47** |
| **Metals (mg/kg)** | | |
| Lead | **789 J** | **383 J** |

| Sample Name | GPEC-TP314A | GPEC-TP816A | GPEC-TP314B | GPEC-TP314C |
|---|---|---|---|---|
| Start Depth (ft.) | 1.5 | 1.5 | 4 | 6.5 |
| End Depth (ft.) | 2 | 2 | 4.5 | 7 |
| Sample Date | 9/30/2014 | 9/30/2014 | 9/30/2014 | 9/30/2014 |
| **Analyte** | | | | |
| **BTEX (mg/kg)** | | | | |
| Benzene | 0.00545 UJ | 0.00604 UJ | **0.134 J** | **0.08 J** |
| Total BTEX | ND | ND | **0.34** | **0.011** |
| **PAHs (mg/kg)** | | | | |
| Naphthalene | **0.031 J** | **0.069** | **3.96** | **22.9** |
| Benz[a]anthracene | **0.106 J** | **0.257 J** | **0.51** | **2.48** |
| Benzo[a]pyrene | **0.125 J** | **0.254 J** | **0.411** | **1.75** |
| Chrysene | **0.128 J** | **0.289 J** | **0.559** | **2.5** |
| Total PAHs | **1.606** | **3.082** | **10.357** | **50.448** |
| **Metals (mg/kg)** | | | | |
| Mercury | **0.514** | **0.423** | **2.56 J** | **0.614** |

| Sample Name | GPEC-GT-5 (7-8) | GPEC-GT-XX 080609 | GPEC-GT-5 (16-18) |
|---|---|---|---|
| Start Depth (ft.) | 7 | 7 | 16 |
| End Depth (ft.) | 8 | 8 | 18 |
| Sample Date | 8/4/2009 | 8/6/2009 | 8/11/2009 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **0.0047 J** | **0.0015 J** | **520** |
| Ethylbenzene | **0.016 J** | **0.05 J** | **35** |
| Total Xylene | **0.0091 J** | 0.027 U | **48** |
| Total BTEX | **0.0298** | **0.0015** | **603** |
| **PAHs (mg/kg)** | | | |
| Naphthalene | **4.3** | **5.2** | **20** |
| Benz[a]anthracene | **2.5** | **2.7** | **0.24 J** |
| Benzo[a]pyrene | **2.2** | **2.3** | **0.17 J** |
| Benzo[b]fluoranthene | **2.5** | **2.7** | **0.22 J** |
| Chrysene | **2.8** | **2.8** | **0.21 J** |
| Total PAHs | **52.25** | **52.07** | **30.2** |
| **Other SVOCs (mg/kg)** | | | |
| Phenol | 0.61 U | 0.6 U | **0.47 J** |
| **Metals (mg/kg)** | | | |
| Mercury | **1.1** | **1.1** | 0.056 U |

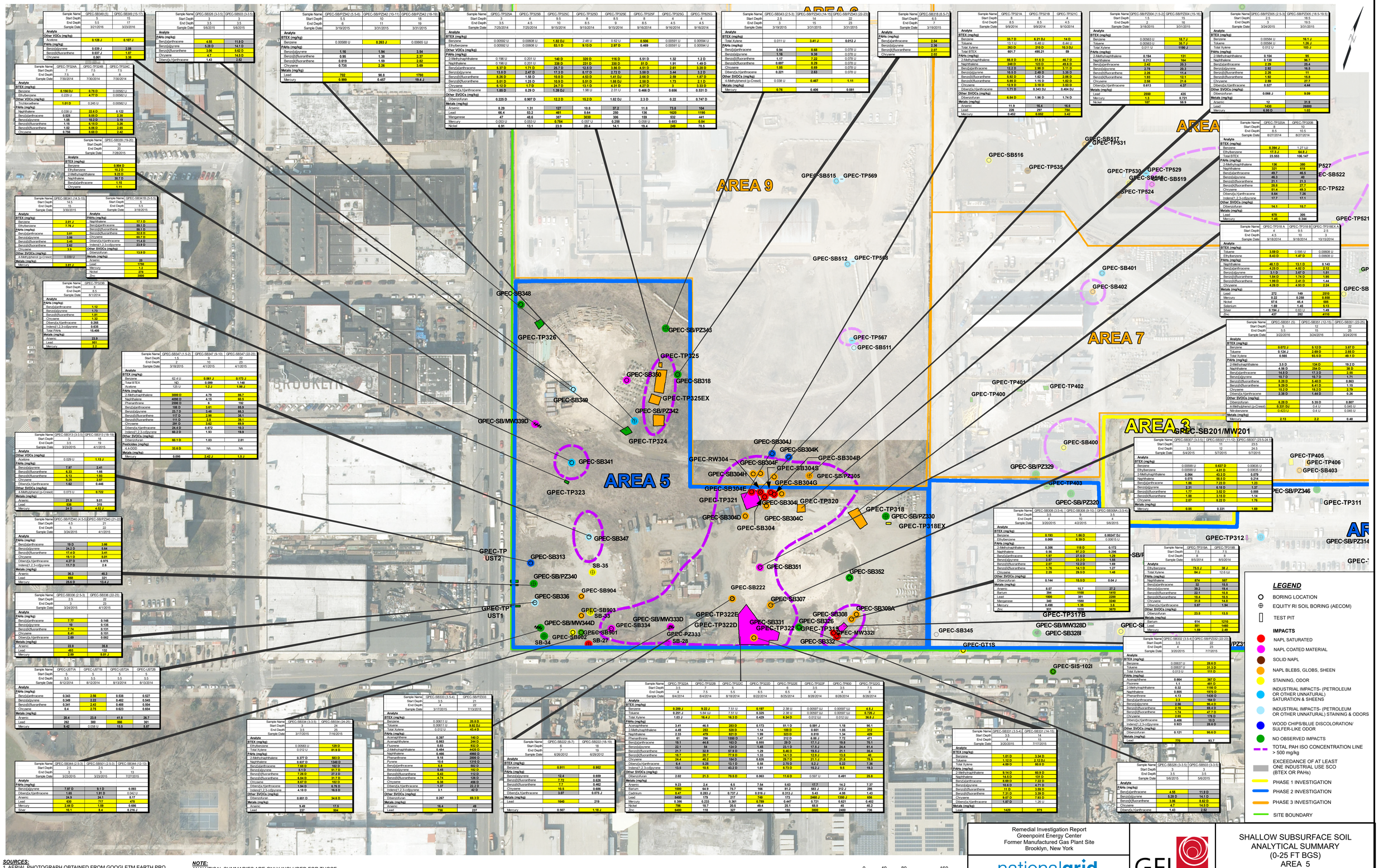
| Sample Name | GPEC-SB317 | GPEC-SB317 (8.5-9.5) | GPEC-SB317 (12-13) |
|---|---|---|---|
| Start Depth (ft.) | 4 | 8.5 | 12 |
| End Depth (ft.) | 4.5 | 9.5 | 13 |
| Sample Date | 3/13/2015 | 4/8/2015 | 4/8/2015 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **1.61** | **64.7 D** | **144 D** |
| Ethylbenzene | **31.3 D** | **1,310** | **22.4 D** |
| Total Xylene | **0.225 J** | **5.33 D** | **30.6 D** |
| Total BTEX | **2.287** | **101.23** | **197** |
| **PAHs (mg/kg)** | | | |
| 2-Methylnaphthalene | **0.569** | **62.6 D** | **40.8 D** |
| Naphthalene | **2.29** | **221 D** | **149 D** |
| Benz[a]anthracene | **0.459** | **3.69 D** | **1.32 D** |
| Benzo[a]pyrene | **0.623** | **2.86 D** | **0.959 D** |
| Benzo[b]fluoranthene | **0.66** | **2.62 D** | **1.06 D** |
| Benzo[k]fluoranthene | **0.46** | **2.19 D** | **0.795 D** |
| Chrysene | **0.536** | **3.91 D** | **1.19 D** |
| Total PAHs | **10.641** | **450.019** | **242.612** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **0.199** | **10.2 D** | **7.35 D** |
| **Metals (mg/kg)** | | | |
| Mercury | **1.06** | **0.107** | 0.0068 U |

| Sample Name | GPEC-SB306 (5-5.5) | GPEC-SB306 (19-20) |
|---|---|---|
| Start Depth (ft.) | 5 | 19 |
| End Depth (ft.) | 5.5 | 20 |
| Sample Date | 3/11/2015 | 7/21/2015 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | 0.00607 U | **129 D** |
| Total Xylene | 0.013 U | **84.1 D** |
| Total BTEX | ND | **213.1** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.514** | **146 D** |
| Naphthalene | **0.562** | **1130 D** |
| Benz[a]anthracene | **5.19** | **2.42** |
| Benzo[a]pyrene | **6.98** | **1.62** |
| Benzo[b]fluoranthene | **6.35** | **1.64** |
| Benzo[k]fluoranthene | **4.38** | **1.17** |
| Chrysene | **6.21** | **2.27** |
| Dibenz[a,h]anthracene | **1.47** | **0.322** |
| Total PAHs | **70.593** | **1397.163** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.413** | **17 D** |
| **Metals (mg/kg)** | | |
| Arsenic | **15.8** | **1.55** |
| Lead | **1440** | **4.13** |
| Mercury | **1.29** | **0.021** |

| Sample Name | GPEC-TP310A |
|---|---|
| Start Depth (ft.) | 1.5 |
| End Depth (ft.) | 2 |
| Sample Date | 10/1/2014 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **2.23 J** |
| Ethylbenzene | **3.28 J** |
| Total BTEX | **7.04** |
| **PAHs (mg/kg)** | |
| Naphthalene | **21.5** |
| Benz[a]anthracene | **1.63** |
| Benzo[a]pyrene | **2.01** |
| Benzo[b]fluoranthene | **2.12** |
| Chrysene | **2.05** |
| Total PAHs | **59.321** |
| **Metals (mg/kg)** | |
| Mercury | **6.08 J** |

| Sample Name | GPEC-TP300A | GPEC-TP300B |
|---|---|---|
| Start Depth (ft.) | 3.5 | 10 |
| End Depth (ft.) | 4 | 10.5 |
| Sample Date | 10/7/2014 | 10/7/2014 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | 0.00566 U | **61.3 D** |
| Total Xylene | 0.011 U | **103 D** |
| Total BTEX | ND | **164.3** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.221** | **153 D** |
| Naphthalene | **0.769** | **1010 D** |
| Benz[a]anthracene | **0.145** | **1.8** |
| Benzo[a]pyrene | **0.289** | **1.14** |
| Chrysene | **0.164** | **1.95** |
| Total PAHs | **3.952** | **1754.378** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.083** | **10.9 D** |

| Sample Name | GPEC-TP307A | GPEC-TP307B |




| Sample Name | GPEC-SB349 (5) | GPEC-SB349 (15-17) |
|---|---|---|
| Start Depth | 5 | 15 |
| End Depth | 5.5 | 17 |
| Sample Date | 3/31/2016 | 3/29/2016 |
| **Analysis** | | |
| **Other VOCs (mg/kg)** | | |
| Acetone | **0.128 J** | **0.107 J** |
| **PAHs (mg/kg)** | | |
| Benzo(a)pyrene | **0.039 J** | **2.08** |
| Benzo(b)fluoranthene | **0.037 J** | **1.97** |
| Chrysene | **0.061** | **3.38** |

| Sample Name | GPEC-SB326 (3-3.5) | GPEC-SB503 (3-3.5) |
|---|---|---|
| Start Depth | 3 | 3 |
| End Depth | 3.5 | 3.5 |
| Sample Date | 5/6/2015 | 5/6/2015 |
| **Analysis** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **4.55** | **11.9 D** |
| Benzo[a]pyrene | **5.28 D** | **14.1 D** |
| Benzo[b]fluoranthene | **3.06** | **8.63 D** |
| Chrysene | **4.7** | **14.5 D** |
| Dibenz[a,h]anthracene | 1.43 | **3.82** |

| Sample Name | GPEC-SB/PZ342 (5.5-6) | GPEC-SB/PZ342 (10-11) | GPEC-SB/PZ342 (18-19) |
|---|---|---|---|
| Start Depth | 5.5 | 10 | 18 |
| End Depth | 6 | 11 | 19 |
| Sample Date | 3/19/2015 | 3/31/2015 | 3/31/2015 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | 0.00588 U | **0.263 J** | 0.00665 UJ |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **1.16** | **1.94** | **3.54** |
| Benzo[b]fluoranthene | **0.95** | **1.38** | **2.37** |
| Benzo[a]pyrene | **0.819** | **1.59** | **2.82** |
| Chrysene | **0.735** | **2.26** | **3.69** |
| **Metals (mg/kg)** | | | |
| Lead | **702** | **98.8** | **1780** |
| Mercury | **0.999** | **0.457** | **19.4 J** |

| Sample Name | GPEC-TP325A | GPEC-TP325B | GPEC-TP325C | GPEC-TP325D | GPEC-TP325E | GPEC-TP325F | GPEC-TP325G | GPEC-TP325G |
|---|---|---|---|---|---|---|---|---|
| Start Depth | 3 | 4 | 9.5 | 8 | 8.5 | 8 | 4 | 4 |
| End Depth | 3.5 | 4.5 | 10 | 8.5 | 9 | 8.5 | 4.5 | 4.5 |
| Sample Date | 7/25/2014 | 7/25/2014 | 9/15/2014 | 9/15/2014 | 9/15/2014 | 9/16/2014 | 9/16/2014 | 9/16/2014 |
| **Analysis** | | | | | | | | |
| **BTEX (mg/kg)** | | | | | | | | |
| Benzene | 0.00592 U | 0.00608 U | **1.82 DJ** | 2.48 U | 0.62 U | **0.506** | 0.00597 U | 0.00594 U |
| Ethylbenzene | 0.00592 U | 0.00608 U | **53.1 D** | **9.13 D** | **2.97 D** | **0.469** | 0.00597 U | 0.00594 U |
| **PAHs (mg/kg)** | | | | | | | | |
| 2-Methylnaphthalene | 0.196 U | 0.201 U | **140 D** | **320 D** | **116 D** | **5.51 D** | **1.32** | **1.2 D** |
| Naphthalene | 0.196 U | 0.201 U | **338 D** | **231 D** | **330 D** | **51 D** | **1.91** | **1.49 D** |
| Benz[a]anthracene | **6.37 D** | **1.71 D** | **25.7 D** | **12.5 D** | **3.86 D** | **4.51 D** | **2.61** | **3.28 D** |
| Benzo[a]pyrene | **13.8 D** | **2.47 D** | **17.3 D** | **8.17 D** | **2.72 D** | **3.98 D** | **3.44** | **3.2 D** |
| Benzo[b]fluoranthene | **8.26 D** | **1.56 D** | **10.8 D** | **4.53 D** | **1.41 DJ** | **2.66 D** | **2.39** | **1.87 D** |
| Benzo[k]fluoranthene | **5.01 D** | **1.26 D** | **10.9 D** | **5.51 D** | **1.88 DJ** | **2.58 D** | **1.72** | **2.1 D** |
| Chrysene | **6.12 D** | **1.7 D** | **24.7 D** | **13.1 D** | **4.31 D** | **4.27 D** | **3** | **3.33 D** |
| Dibenz[a,h]anthracene | **1.86 D** | **0.29 D** | **1.39 DJ** | 1.98 U | 2.01 U | 0.466 D | 0.656 | 0.631 D |
| **Other SVOCs (mg/kg)** | | | | | | | | |
| Dibenzofuran | **0.225 D** | **0.907 D** | **12.2 D** | **1.82 DJ** | **2.3 D** | **0.22** | | 0.747 D |
| **Metals (mg/kg)** | | | | | | | | |
| Arsenic | **8.29** | **1.31** | **127** | **10.8** | **37.2** | **11.8** | **73.9** | **104** |
| Lead | **66.4** | **53.2** | **461** | **8.64** | **250** | **136** | **1620** | **1190** |
| Manganese | **47** | **48.6** | **387** | **3030** | **306** | **159** | **532** | **441** |
| Mercury | 0.053 U | 0.053 U | **0.784** | 0.057 U | **0.258** | 0.058 U | **0.683** | **0.54** |
| Nickel | **6.91** | **13.1** | **23.9** | **20.4** | **14.1** | **19.4** | **249** | **78.5** |

| Sample Name | GPEC-SB343 (2.5-3) | GPEC-SB343 (14-15) | GPEC-SB/PZ343 (22-23) |
|---|---|---|---|
| Start Depth | 2.5 | 14 | 22 |
| End Depth | 3 | 15 | 23 |
| Sample Date | 3/19/2015 | 3/31/2015 | 3/31/2015 |
| **Analysis** | | | |
| **PAHs (mg/kg)** | | | |
| Total Xylene | 0.011 U | **3.41 J** | **0.012 J** |
| **PAHs (mg/kg)** | | | |
| Benz[a]anthracene | **0.94** | **0.68** | 0.078 U |
| Benzo[a]pyrene | **1.16** | **0.38** | 0.078 U |
| Benzo[b]fluoranthene | **1.17** | **7.22** | 0.078 U |
| Benzo[k]fluoranthene | **0.697** | **0.29** | 0.078 U |
| Chrysene | **1.05** | **0.69** | 0.078 U |
| Dibenz[a,h]anthracene | **0.221** | **2.63** | 0.078 U |
| **Other SVOCs (mg/kg)** | | | |
| 4-Methylphenol (p-Cresol) | 0.038 U | **0.467** | **1.11** |
| **Metals (mg/kg)** | | | |
| Mercury | **0.76** | **0.406** | **0.081** |

| Sample Name | GPEC-SB318 (6.5-7) |
|---|---|
| Start Depth | 6.5 |
| End Depth | 7 |
| Sample Date | 3/19/2015 |
| **Analysis** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.04** |
| Benzo[a]pyrene | **2.36** |
| Benzo[b]fluoranthene | **2.07** |
| Chrysene | **2.02** |

| Sample Name | GPEC-TP321A | GPEC-TP321B | GPEC-TP321C |
|---|---|---|---|
| Start Depth | 8 | 8 | 4 |
| End Depth | 8.5 | 8.5 | 4.5 |
| Sample Date | 9/9/2014 | 9/9/2014 | 9/10/2014 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **33.7 D** | **6.31 DJ** | **14 D** |
| Toluene | 13.1 U | 6.48 U | 6.44 U |
| Total Xylene | **283 D** | **219 D** | **10.3 DJ** |
| Total BTEX | **501.7** | **495.31** | **59** |
| **PAHs (mg/kg)** | | | |
| 2-Methylnaphthalene | **88.8 D** | **51.6 D** | **46.7 D** |
| Naphthalene | **248 D** | **123 D** | **49.6 D** |
| Benz[a]anthracene | **12.2 D** | **2.96 D** | **3.15** |
| Benzo[a]pyrene | **10.5 D** | **2.46 D** | **3.35 D** |
| Benzo[b]fluoranthene | **5.92 D** | **1.62 D** | **2.06 D** |
| Benzo[k]fluoranthene | **5.85 D** | **1.15 D** | **1.82 D** |
| Chrysene | **13.1 D** | **3.16 D** | **3.53 D** |
| Dibenz[a,h]anthracene | **1.71 D** | **0.343 DJ** | **0.404 DJ** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **6.84 D** | **1.96 D** | **1.74 D** |
| **Metals (mg/kg)** | | | |
| Arsenic | **11.9** | **16.4** | **16.6** |
| Lead | **226** | **297** | **784** |
| Mercury | **0.452** | **0.932** | **3.42** |

| Sample Name | GPEC-SB/PZ304 (1.5-2) | GPEC-SB/PZ304 (15-16) |
|---|---|---|
| Start Depth | 1.5 | 15 |
| End Depth | 2 | 16 |
| Sample Date | 3/18/2015 | 3/31/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00563 U | **18.7 J** |
| Toluene | 0.00563 U | **36.7 J** |
| Total Xylene | 0.011 U | **1190 J** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.194** | **131** |
| Naphthalene | **0.212** | **164** |
| Benz[a]anthracene | **2.42** | **20.3** |
| Benzo[a]pyrene | **2.78** | **20.3** |
| Benzo[b]fluoranthene | **2.26** | **11.4** |
| Benzo[k]fluoranthene | **1.93** | **13.1** |
| Chrysene | **3.69** | **21.6** |
| Dibenz[a,h]anthracene | **0.613** | **4.37** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.066 J** | **9.09** |
| **Metals (mg/kg)** | | |
| Arsenic | **12** | **31.9** |
| Lead | **1430** | **26800** |
| Mercury | **6.95 D** | **1.02** |

| Sample Name | GPEC-SB/PZ305 (2.5-3) | GPEC-SB/PZ305 (18.5-19.5) |
|---|---|---|
| Start Depth | 2.5 | 18.5 |
| End Depth | 3 | 19.5 |
| Sample Date | 3/24/2015 | 3/31/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00564 U | **16.1 J** |
| Toluene | 0.00564 U | **1.38 J** |
| Total Xylene | 0.012 U | **103 J** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.104** | **95** |
| Naphthalene | **0.138** | **96.7** |
| Benz[a]anthracene | **2.29** | **26.4** |
| Benzo[a]pyrene | **2.92** | **16.5** |
| Benzo[b]fluoranthene | **2.26** | **11** |
| Benzo[k]fluoranthene | **1.39** | **11.5** |
| Chrysene | **3.89** | **27.7** |
| Dibenz[a,h]anthracene | **0.527** | **4.44** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.066 J** | **9.09** |
| **Metals (mg/kg)** | | |
| Arsenic | **12** | **31.9** |
| Lead | **1430** | **26800** |
| Mercury | **6.95 D** | **1.02** |

| Sample Name | GPEC-TP320A | GPEC-TP320B |
|---|---|---|
| Start Depth | 8 | 10 |
| End Depth | 8.5 | 10.5 |
| Sample Date | 8/27/2014 | 8/27/2014 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.394 J** | 1.27 U |
| Ethylbenzene | **17.3 J** | **64.8 J** |
| Total BTEX | **23.553** | **106.147** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **136** | **350** |
| Naphthalene | **321** | **618** |
| Benz[a]anthracene | **49.7** | **46.5** |
| Benzo[a]pyrene | **46.3** | **40** |
| Benzo[b]fluoranthene | **21.1** | **21.3** |
| Benzo[k]fluoranthene | **26.8** | **27.7** |
| Chrysene | **51.4** | **49.3** |
| Dibenz[a,h]anthracene | **5.64** | **7.06** |
| Indeno[1,2,3-cd]pyrene | **17.7** | **17.1** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **14.1** | **15.7** |
| **Metals (mg/kg)** | | |
| Lead | **670** | **305** |
| Mercury | **1.45** | **0.344** |

| Sample Name | GPEC-TP318 A | GPEC-TP318 B | GPEC-TP318EX A |
|---|---|---|---|
| Start Depth | 4 | 8.5 | 2.5 |
| End Depth | 4.5 | 10 | 3 |
| Sample Date | 9/18/2014 | 9/18/2014 | 10/15/2014 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Toluene | **3.92 D** | 0.595 U | 0.00608 U |
| Ethylbenzene | **6.43 D** | **1.47 D** | 0.00608 U |
| **PAHs (mg/kg)** | | | |
| Naphthalene | **48.1 D** | **13.1 D** | **0.143** |
| Benz[a]anthracene | **4.25 D** | **4.82 D** | **2.12** |
| Benzo[a]pyrene | **3.1 D** | **3.67 D** | **1.51** |
| Benzo[b]fluoranthene | **1.94 D** | **1.74 D** | **1.05** |
| Benzo[k]fluoranthene | **1.99 D** | **2.41 D** | **1.44** |
| Chrysene | **4.26 D** | **4.93 D** | **2.24** |
| **Metals (mg/kg)** | | | |
| Lead | **272** | **149** | **2010** |
| Mercury | **0.22** | **0.256** | **0.558** |
| Nickel | **57.6** | **45.4** | **595** |
| Selenium | **1.69** | **1.45** | **6.13** |
| Silver | **0.194 J** | 0.83 U | **1.49** |
| Zinc | **437** | **282** | **4110** |

| Sample Name | GPEC-SB307 (3-3.5) | GPEC-SB307 (11-12) | GPEC-SB307 (23.5-24.5) |
|---|---|---|---|
| Start Depth | 3 | 11 | 23.5 |
| End Depth | 3.5 | 12 | 24.5 |
| Sample Date | 5/4/2015 | 5/7/2015 | 5/7/2015 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | 0.00599 U | **0.637 D** | 0.00635 U |
| Ethylbenzene | 0.00599 U | **4.01 D** | 0.00635 U |
| 2-Methylnaphthalene | **0.064** | **43.3 D** | **0.079** |
| Naphthalene | **0.075** | **58.5 D** | **0.214** |
| Benz[a]anthracene | **1.86** | **7.23 D** | **1.23** |
| Benzo[a]pyrene | **2.31** | **6.18 D** | **1.37** |
| Benzo[b]fluoranthene | **1.77** | **3.52 D** | **0.888** |
| Benzo[k]fluoranthene | **1.88** | **3.15 D** | **1.14** |
| Chrysene | **2.07** | **8.22 D** | **1.76** |
| **Metals (mg/kg)** | | | |
| Mercury | **0.55** | **0.331** | **1.69** |

| Sample Name | GPEC-SB308 (3.5-4) | GPEC-SB308 (9-10) | GPEC-SB308A (3.5-4) |
|---|---|---|---|
| Start Depth | 3.5 | 9 | 3.5 |
| End Depth | 4 | 10 | 4 |
| Sample Date | 3/20/2015 | 4/2/2015 | 5/6/2015 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **0.193** | **1.66 D** | **0.00247 DJ** |
| Ethylbenzene | **0.069** | **8.39 D** | 0.00615 U |
| **PAHs (mg/kg)** | | | |
| 2-Methylnaphthalene | **0.306** | **118 D** | **0.172** |
| Naphthalene | **0.56** | **97.3 D** | **0.296** |
| Benz[a]anthracene | **1.97** | **27.6 D** | **1.25** |
| Benzo[a]pyrene | **2.07** | **23.3 D** | **1.56** |
| Benzo[b]fluoranthene | **2.07** | **12.2 D** | **1.69** |
| Benzo[k]fluoranthene | **1.76** | **14.1 D** | **1.27** |
| Chrysene | **2.35** | **29.1 D** | **1.48** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **0.144** | **15.6 D** | **0.04 J** |
| **Metals (mg/kg)** | | | |
| Arsenic | **8.07** | **15.7** | **27.2** |
| Barium | **304** | **1100** | **1410** |
| Lead | **1900** | **381** | **2200** |
| Manganese | **340** | **1500** | **3240** |
| Mercury | **0.498** | **1.36** | **3.6** |
| Zinc | **931** | **1220** | **3670** |

| Sample Name | GPEC-TP319A | GPEC-TP319B |
|---|---|---|
| Start Depth | 7.5 | 8 |
| End Depth | 8 | 8.5 |
| Sample Date | 8/5/2014 | 8/5/2014 |
| **Analysis** | | |
| Ethylbenzene | **75.9 J** | **38 J** |
| Total Xylene | **84 J** | **12.6 U** |
| **PAHs (mg/kg)** | | |
| Naphthalene | **874** | **587** |
| Benz[a]anthracene | **32** | **15.5** |
| Benzo[a]pyrene | **39.2** | **19.4** |
| Benzo[b]fluoranthene | **22.1** | **10.8** |
| Benzo[k]fluoranthene | **18.4** | **10.5** |
| Chrysene | **31.8** | **14.8** |
| Dibenz[a,h]anthracene | **5.87** | **1.94** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **23.5** | **13.5** |
| **Metals (mg/kg)** | | |
| Barium | **614** | **1210** |
| Lead | **581** | **1460** |
| Mercury | **1.99** | **2.49** |

| Sample Name | GPEC-SB332 (3.5-4) | GPEC-SB/PZ332 (22-23) |
|---|---|---|
| Start Depth | 3.5 | 22 |
| End Depth | 4 | 23 |
| Sample Date | 3/20/2015 | 7/7/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00637 U | **28.6 D** |
| Toluene | 0.00637 U | **31.3 D** |
| Total Xylene | 0.0113 U | **111 D** |
| **PAHs (mg/kg)** | | |
| Acenaphthene | **0.664** | **367 D** |
| Fluorene | **1.1** | **401 D** |
| 2-Methylnaphthalene | **0.32** | **1150 D** |
| Naphthalene | **0.805** | **1970 D** |
| Phenanthrene | **4.13** | **1430 D** |
| Benz[a]anthracene | **2.3** | **164 D** |
| Benzo[a]pyrene | **2.66** | **96.4 D** |
| Benzo[b]fluoranthene | **2.16** | **65.6 D** |
| Benzo[k]fluoranthene | **1.74** | **47.7 D** |
| Chrysene | **2.66** | **176 D** |
| Dibenz[a,h]anthracene | **0.466** | **18 D** |
| Indeno[1,2,3-cd]pyrene | **0.923** | **28.6 D** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.121** | **99.6 D** |
| **Metals (mg/kg)** | | |
| Lead | **770** | **93.7** |

| Sample Name | GPEC-SB351 (5) | GPEC-SB351 (12-15) | GPEC-SB351 (22-25) |
|---|---|---|---|
| Start Depth | 5 | 12 | 22 |
| End Depth | 5.5 | 15 | 25 |
| Sample Date | 3/22/2016 | 3/24/2016 | 3/24/2016 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **0.072 J** | **5.12 D** | **3.87 D** |
| Toluene | **0.124 J** | **2.69 D** | **2.86 D** |
| Total Xylene | 0.565 | **93.5 D** | **49.1 D** |
| **PAHs (mg/kg)** | | | |
| 2-Methylnaphthalene | **3.5 D** | **134 D** | **19.2 D** |
| Naphthalene | **4.56 D** | **284 D** | **38 D** |
| Benz[a]anthracene | **14.8 D** | **17.3 D** | **2.56** |
| Benzo[a]pyrene | **10.7 D** | **10.7 D** | **1.71** |
| Benzo[b]fluoranthene | **8.28 D** | **8.48 D** | **0.863** |
| Benzo[k]fluoranthene | **9.29 D** | **6.41 D** | **1.15** |
| Chrysene | **15.2 D** | **18.2 D** | **2.79** |
| Dibenz[a,h]anthracene | **2.38 D** | **1.44 D** | **0.28** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **6.38 D** | **5.35 D** | **0.807** |
| 4-Methylphenol (p-Cresol) | **0.331 DJ** | 0.4 U | 0.045 U |
| Nitrobenzene | 0.423 U | 0.4 U | 0.045 U |
| **Metals (mg/kg)** | | | |
| Mercury | **2.13** | **2.2** | **0.48** |

| Sample Name | GPEC-SB313 (3-3.5) | GPEC-SB313 (18-19) |
|---|---|---|
| Start Depth | 3 | 18 |
| End Depth | 3.5 | 19 |
| Sample Date | 3/20/2015 | 4/1/2015 |
| **Analysis** | | |
| **Other VOCs (mg/kg)** | | |
| Acetone | 0.109 U | **1.13 J** |
| **PAHs (mg/kg)** | | |
| Benzo[a]pyrene | **7.97** | **2.41** |
| Benzo[b]fluoranthene | **6.33** | **1.66** |
| Benzo[k]fluoranthene | **5.13** | **1.03** |
| Chrysene | **9.25** | **2.67** |
| Dibenz[a,h]anthracene | **1.62** | **0.446** |
| **Other SVOCs (mg/kg)** | | |
| 4-Methylphenol (p-Cresol) | 0.073 U | **0.722** |
| **Metals (mg/kg)** | | |
| Arsenic | **21.9** | **9.01** |
| Lead | **538** | **315** |
| Mercury | **24.0** | **4.52 J** |

| Sample Name | GPEC-SB347 (1.5-2) | GPEC-SB347 (9-10) | GPEC-SB347 (22-23) |
|---|---|---|---|
| Start Depth | 1.5 | 9 | 22 |
| End Depth | 2 | 10 | 23 |
| Sample Date | 3/19/2015 | 4/1/2015 | 4/1/2015 |
| **Analysis** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | 62.4 U | **0.061 J** | **0.173 J** |
| Total BTEX | ND | **0.099** | **1.146** |
| Acetone | 125 U | **1.3 J** | **1.99 J** |
| **PAHs (mg/kg)** | | | |
| 2-Methylnaphthalene | **3000 D** | **4.79** | **88.7** |
| Naphthalene | **4090 D** | **4.15** | **60.5** |
| Phenanthrene | **2090 D** | **6** | **102** |
| Benz[a]anthracene | **188 D** | **3.61** | **55.9** |
| Benzo[a]pyrene | **23.7 D** | **3.48** | **56.3** |
| Benzo[b]fluoranthene | **117 D** | **2.56** | **39.1** |
| Benzo[k]fluoranthene | **111 D** | **2.8** | **39.1** |
| Chrysene | **291 D** | **3.62** | **69.9** |
| Dibenz[a,h]anthracene | **24.4 D** | **0.872** | **10.3** |
| Indeno[1,2,3-cd]pyrene | **60.2 D** | **1.93** | **19.9** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **60.1 D** | **1.03** | **2.81** |
| **Pesticides (mg/kg)** | | | |
| 4,4-DDD | **33.6 D** | NA | NA |
| **Metals (mg/kg)** | | | |
| Mercury | **0.095** | **2.42 J** | **1.8 J** |

| Sample Name | GPEC-SB/PZ340 (4.5-5) | GPEC-SB/PZ340 (21-22) |
|---|---|---|
| Start Depth | 4.5 | 21 |
| End Depth | 5 | 22 |
| Sample Date | 3/24/2015 | 4/1/2015 |
| **Analysis** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **19 D** | **3.66** |
| Benzo[a]pyrene | **24.2 D** | **5.64** |
| Benzo[b]fluoranthene | **17.4 D** | **3.41** |
| Chrysene | **19.1 D** | **5.01** |
| Dibenz[a,h]anthracene | **4.27 D** | **0.975** |
| Indeno[1,2,3-cd]pyrene | **11.7 D** | **2.6** |
| **Metals (mg/kg)** | | |
| Arsenic | **36.3** | **45.3** |
| Lead | **668** | **321** |
| Mercury | **25.6 D** | **13.4 J** |

| Sample Name | GPEC-SB336 (2.5-3) | GPEC-SB336 (22-23) |
|---|---|---|
| Start Depth | 2.5 | 22 |
| End Depth | 3 | 23 |
| Sample Date | 3/24/2015 | 4/1/2015 |
| **Analysis** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **7.77** | **0.148** |
| Benzo[a]pyrene | **10** | **0.135** |
| Benzo[b]fluoranthene | **7.74** | **0.131** |
| Chrysene | **8.41** | **0.151** |
| Dibenz[a,h]anthracene | **2.69** | **0.092** |
| **Metals (mg/kg)** | | |
| Arsenic | **22.8** | **35.8** |
| Lead | **403** | **132** |
| Mercury | **2.89** | **5.01 J** |

| Sample Name | GPEC-SB339 (19-20) |
|---|---|
| Start Depth | 19 |
| End Depth | 20 |
| Sample Date | 7/28/2015 |
| **Analysis** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.904 D** |
| Ethylbenzene | **10.2 D** |
| 2-Methylnaphthalene | **9.23 D** |
| Naphthalene | **30.7 D** |
| Benz[a]anthracene | **1.15** |
| Chrysene | **1.11** |

| Sample Name | GPEC-SB341 (14.5-15) | GPEC-SB341B (5-5.5) |
|---|---|---|
| Start Depth | 14.5 | 5 |
| End Depth | 15 | 5.5 |
| Sample Date | 3/30/2015 | 3/18/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **2.61 J** | **171 D** |
| Ethylbenzene | **7.76 J** | **88.1 D** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **3.81** | **64.8 D** |
| Benzo[a]pyrene | **3.66** | **60.2 D** |
| Benzo[b]fluoranthene | **3.46** | **53.4 D** |
| Benzo[k]fluoranthene | **2.42** | **23.9 D** |
| Chrysene | **3.9** | **69.2 D** |
| **Other SVOCs (mg/kg)** | | |
| 4-Methylphenol (p-Cresol) | 0.039 U | **13.9 D** |
| **Metals (mg/kg)** | | |
| Mercury | **3.91 J** | **35** |
| Lead | | **1190** |
| Mercury | | **1.2** |
| Nickel | | **219** |
| Zinc | | **3600** |

| Sample Name | GPEC-SB328 |
|---|---|
| Start Depth | 8 |
| End Depth | 8.5 |
| Sample Date | 8/1/2014 |
| **Analysis** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.12** |
| Benzo[a]pyrene | **1.73** |
| Benzo[b]fluoranthene | **1.81** |
| Chrysene | **1.32** |
| Dibenz[a,h]anthracene | **0.265** |
| Indeno[1,2,3-cd]pyrene | **0.635** |
| Total PAHs | **15.408** |
| **Metals (mg/kg)** | |
| Arsenic | **23.9** |
| Lead | **303** |
| Mercury | **2.3** |

| Sample Name | GPEC-SB/PZ332 (5-6) | GPEC-SB/PZ332 (18-19) |
|---|---|---|
| Start Depth | 5 | 18 |
| End Depth | 6 | 19 |
| Sample Date | 6/26/2012 | 6/29/2012 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.911** | **0.952** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **12.4** | **0.659** |
| Benzo[b]fluoranthene | **7.72** | **0.626** |
| Benzo[k]fluoranthene | **7.7** | **0.462** |
| Chrysene | **10.5** | **0.656** |
| Dibenz[a,h]anthracene | **3.87** | **0.078 J** |
| **Metals (mg/kg)** | | |
| Lead | **1640** | **219** |
| Mercury | **0.567** | **1.18 J** |

| Sample Name | GPEC-SB333 (3.5-4) | GPEC-SB/PZ333 |
|---|---|---|
| Start Depth | 3.5 | 21 |
| End Depth | 4 | 22 |
| Sample Date | 3/17/2015 | 7/13/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00611 U | **20.8 D** |
| Toluene | 0.00611 U | **9.93 DJ** |
| Total Xylene | 0.0112 U | **43.4 D** |
| **PAHs (mg/kg)** | | |
| Acenaphthene | **0.397** | **146 D** |
| Acenaphthylene | **0.863** | **244 D** |
| Fluorene | **0.83** | **932 D** |
| 2-Methylnaphthalene | **0.454** | **4420 D** |
| Naphthalene | **0.466** | **4960 D** |
| Phenanthrene | **9.18** | **2800 D** |
| Pyrene | **10.6** | **1310 D** |
| Benz[a]anthracene | **5.8** | **502 D** |
| Benzo[a]pyrene | **5.45** | **192 D** |
| Benzo[b]fluoranthene | **5.43** | **112 D** |
| Benzo[k]fluoranthene | **4.74** | **126 D** |
| Chrysene | **8.38** | **406 D** |
| Dibenz[a,h]anthracene | **1.37** | **22.2 D** |
| Indeno[1,2,3-cd]pyrene | **3.1** | **42 D** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.267** | **69.3 D** |
| **Metals (mg/kg)** | | |
| Arsenic | **16.4** | **49** |
| Lead | **738** | **237** |

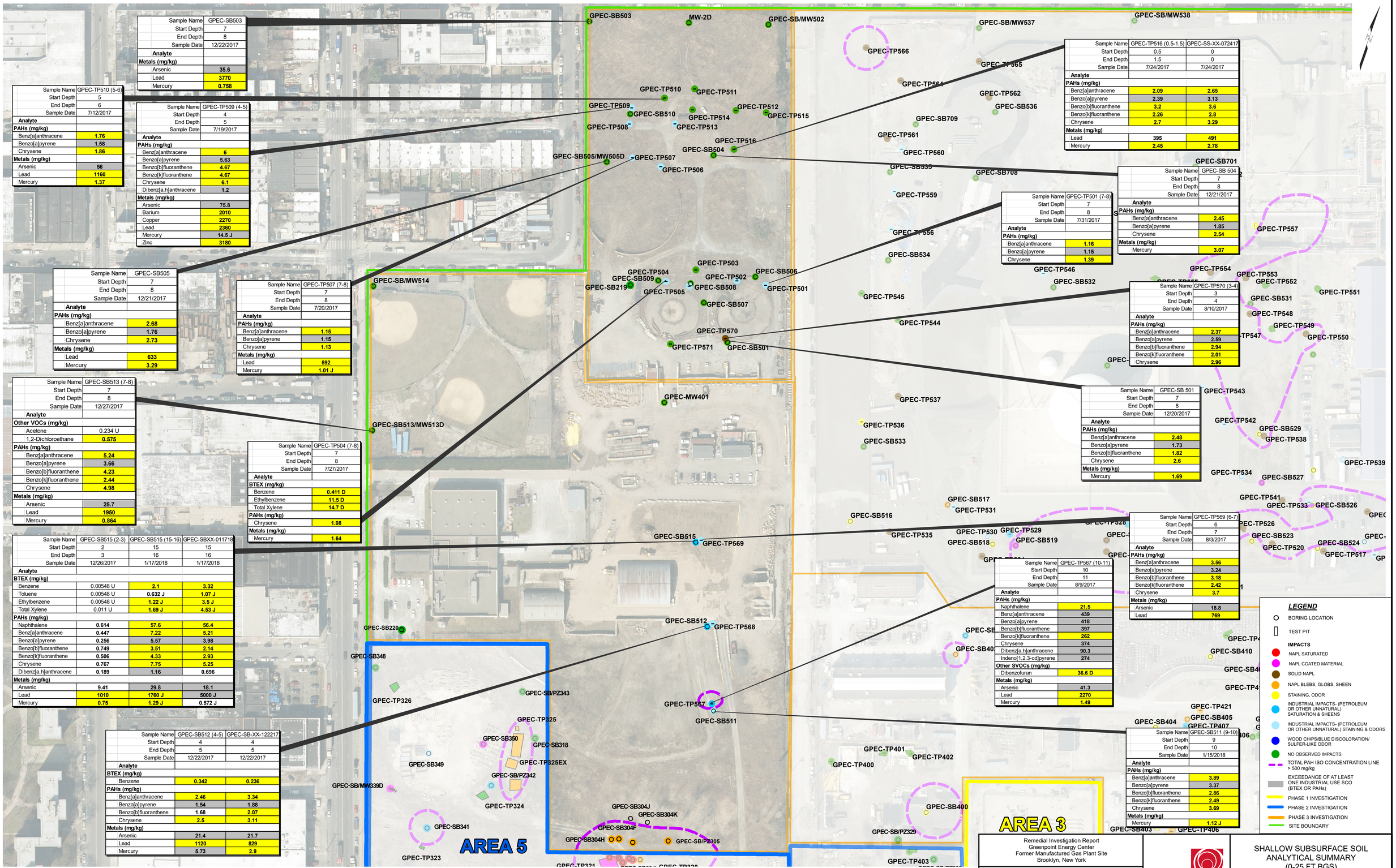
| Sample Name | GPEC-SB334 (3-3.5) | GPEC-SB334 (24-25) |
|---|---|---|
| Start Depth | 3 | 24 |
| End Depth | 3.5 | 25 |
| Sample Date | 3/17/2015 | 7/16/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | 0.00583 U | **129 D** |
| Total Xylene | 0.012 U | **81.9 D** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **0.377 D** | **583 D** |
| Naphthalene | **0.637 D** | **1340 D** |
| Benz[a]anthracene | **7.68 D** | **192 D** |
| Benzo[a]pyrene | **8.1 D** | **51.7 D** |
| Benzo[b]fluoranthene | **7.26 D** | **27.3 D** |
| Benzo[k]fluoranthene | **6.84 D** | **31.7 D** |
| Chrysene | **8.67 D** | **152 D** |
| Dibenz[a,h]anthracene | **1.94 D** | **6.76 D** |
| Indeno[1,2,3-cd]pyrene | **4.19 D** | **16.8 D** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.651 D** | **34.6 D** |
| **Metals (mg/kg)** | | |
| Arsenic | **9.49** | **17.5** |
| Lead | **237** | **504** |

| Sample Name | GPEC-SB344 (2.5-3) | GPEC-SB501 (2.5-3) | GPEC-SB344 (12-13) |
|---|---|---|---|
| Start Depth | 2.5 | 3 | 12 |
| End Depth | 3 | 3.5 | 13 |
| Sample Date | 3/23/2015 | 3/23/2015 | 7/27/2015 |
| **Analysis** | | | |
| **PAHs (mg/kg)** | | | |
| Benzo[a]pyrene | **7.97 D** | **9.1 D** | **0.093** |
| Dibenz[a,h]anthracene | **1.55** | **1.91 D** | 0.0412 U |
| Arsenic | **24.9** | **24.1** | **8.17** |
| Lead | **830** | **717** | **478** |
| Mercury | **2.44 D** | **1.59** | **0.606** |
| Silver | **10.1** | **8.4** | **0.216 J** |

| Sample Name | GPEC-SB503 (3-3.5) | GPEC-SB503 (3-3.5) |
|---|---|---|
| Start Depth | 3 | 3 |
| End Depth | 3.5 | 3.5 |
| Sample Date | 5/6/2015 | 5/6/2015 |
| **Analysis** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **4.55** | **11.9 D** |
| Benzo[a]pyrene | **5.28 D** | **14.1 D** |
| Benzo[b]fluoranthene | **3.06** | **8.62 D** |
| Chrysene | **4.7** | **14.5 D** |
| Dibenz[a,h]anthracene | **1.43** | **2.52** |

| Sample Name | GPEC-SB331 (3.5-4) | GPEC-SB331 (14-15) |
|---|---|---|
| Start Depth | 3.5 | 14 |
| End Depth | 4 | 15 |
| Sample Date | 3/20/2015 | 7/17/2015 |
| **Analysis** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **1.61 D** | **3.34 D** |
| Toluene | **1.12 D** | **2.12 DJ** |
| Total Xylene | **4.99 D** | **80.8 D** |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | **9.14 D** | **60.9 D** |
| Naphthalene | **14.6 D** | **131 D** |
| Benz[a]anthracene | **8.69 D** | **7.22 D** |
| Benzo[a]pyrene | **10.6 D** | **4.71 D** |
| Benzo[b]fluoranthene | **11 D** | **3.89 D** |
| Benzo[k]fluoranthene | **7.31 D** | **3.34 D** |
| Chrysene | **9.67 D** | **7.93 D** |
| Dibenz[a,h]anthracene | **1.87 D** | 1.26 U |
| **Metals (mg/kg)** | | |
| Lead | **1420** | **875** |

| Sample Name | GPEC-SB322 (6-7) | GPEC-SB322 (18-19) |
|---|---|---|
| Start Depth | 6 | 18 |
| End Depth | 7 | 19 |
| Sample Date | 6/26/2012 | 6/29/2012 |
| **Analysis** | | |
| **




| | |
|---|---|
| Sample Name | GPEC-SB503 |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 12/22/2017 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| Arsenic | 35.6 |
| Lead | 3770 |
| Mercury | 0.758 |

| | |
|---|---|
| Sample Name | GPEC-TP510 (5-6) |
| Start Depth | 5 |
| End Depth | 6 |
| Sample Date | 7/12/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.76 |
| Benzo[a]pyrene | 1.58 |
| Chrysene | 1.86 |
| **Metals (mg/kg)** | |
| Arsenic | 56 |
| Lead | 1160 |
| Mercury | 1.37 |

| | |
|---|---|
| Sample Name | GPEC-TP509 (4-5) |
| Start Depth | 4 |
| End Depth | 5 |
| Sample Date | 7/19/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 6 |
| Benzo[a]pyrene | 5.63 |
| Benzo[b]fluoranthene | 4.67 |
| Benzo[k]fluoranthene | 4.67 |
| Chrysene | 6.1 |
| Dibenz[a,h]anthracene | 1.2 |
| **Metals (mg/kg)** | |
| Arsenic | 75.8 |
| Barium | 2010 |
| Copper | 2270 |
| Lead | 2360 |
| Mercury | 14.5 J |
| Zinc | 3180 |

| | | |
|---|---|---|
| Sample Name | GPEC-TP516 (0.5-1.5) | GPEC-SS-XX-072417 |
| Start Depth | 0.5 | 0 |
| End Depth | 1.5 | 0 |
| Sample Date | 7/24/2017 | 7/24/2017 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 2.09 | 2.65 |
| Benzo[a]pyrene | 2.39 | 3.13 |
| Benzo[b]fluoranthene | 3.2 | 3.6 |
| Benzo[k]fluoranthene | 2.26 | 2.8 |
| Chrysene | 2.7 | 3.29 |
| **Metals (mg/kg)** | | |
| Lead | 395 | 491 |
| Mercury | 2.45 | 2.78 |

| | |
|---|---|
| Sample Name | GPEC-SB 504 |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 12/21/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.45 |
| Benzo[a]pyrene | 1.85 |
| Chrysene | 2.54 |
| **Metals (mg/kg)** | |
| Mercury | 3.07 |

| | |
|---|---|
| Sample Name | GPEC-TP501 (7-8) |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 7/31/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.16 |
| Benzo[a]pyrene | 1.15 |
| Chrysene | 1.39 |

| | |
|---|---|
| Sample Name | GPEC-SB505 |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 12/21/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.68 |
| Benzo[a]pyrene | 1.76 |
| Chrysene | 2.73 |
| **Metals (mg/kg)** | |
| Lead | 633 |
| Mercury | 3.29 |

| | |
|---|---|
| Sample Name | GPEC-TP507 (7-8) |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 7/20/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.15 |
| Benzo[a]pyrene | 1.15 |
| Chrysene | 1.13 |
| **Metals (mg/kg)** | |
| Lead | 592 |
| Mercury | 1.01 J |

| | |
|---|---|
| Sample Name | GPEC-TP570 (3-4) |
| Start Depth | 3 |
| End Depth | 4 |
| Sample Date | 8/10/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.37 |
| Benzo[a]pyrene | 2.59 |
| Benzo[b]fluoranthene | 2.94 |
| Benzo[k]fluoranthene | 2.01 |
| Chrysene | 2.96 |

| | |
|---|---|
| Sample Name | GPEC-SB513 (7-8) |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 12/27/2017 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | 0.234 U |
| 1,2-Dichloroethane | 0.575 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 5.24 |
| Benzo[a]pyrene | 3.66 |
| Benzo[b]fluoranthene | 4.23 |
| Benzo[k]fluoranthene | 2.44 |
| Chrysene | 4.98 |
| **Metals (mg/kg)** | |
| Arsenic | 25.7 |
| Lead | 1950 |
| Mercury | 0.864 |

| | |
|---|---|
| Sample Name | GPEC-SB 501 |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 12/20/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.48 |
| Benzo[a]pyrene | 1.73 |
| Benzo[b]fluoranthene | 1.82 |
| Chrysene | 2.6 |
| **Metals (mg/kg)** | |
| Mercury | 1.69 |

| | |
|---|---|
| Sample Name | GPEC-TP504 (7-8) |
| Start Depth | 7 |
| End Depth | 8 |
| Sample Date | 7/27/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.411 D |
| Ethylbenzene | 11.5 D |
| Total Xylene | 14.7 D |
| **PAHs (mg/kg)** | |
| Chrysene | 1.08 |
| **Metals (mg/kg)** | |
| Mercury | 1.64 |

| | | | |
|---|---|---|---|
| Sample Name | GPEC-SB515 (2-3) | GPEC-SB515 (15-16) | GPEC-SBXX-011718 |
| Start Depth | 2 | 15 | 15 |
| End Depth | 3 | 16 | 16 |
| Sample Date | 12/26/2017 | 1/17/2018 | 1/17/2018 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | 0.00548 U | 2.1 | 3.32 |
| Toluene | 0.00548 U | 0.632 J | 1.07 J |
| Ethylbenzene | 0.00548 U | 1.22 J | 3.5 J |
| Total Xylene | 0.011 U | 1.69 J | 4.53 J |
| **PAHs (mg/kg)** | | | |
| Naphthalene | 0.614 | 57.6 | 56.4 |
| Benz[a]anthracene | 0.447 | 7.22 | 5.21 |
| Benzo[a]pyrene | 0.256 | 5.57 | 3.98 |
| Benzo[b]fluoranthene | 0.749 | 3.51 | 2.14 |
| Benzo[k]fluoranthene | 0.506 | 4.33 | 2.93 |
| Chrysene | 0.767 | 7.75 | 5.25 |
| Dibenz[a,h]anthracene | 0.189 | 1.16 | 0.696 |
| **Metals (mg/kg)** | | | |
| Arsenic | 9.41 | 29.8 | 18.1 |
| Lead | 1010 | 1760 J | 5000 J |
| Mercury | 0.75 | 1.29 J | 0.572 J |

| | | |
|---|---|---|
| Sample Name | GPEC-SB512 (4-5) | GPEC-SB-XX-122217 |
| Start Depth | 4 | 4 |
| End Depth | 5 | 5 |
| Sample Date | 12/22/2017 | 12/22/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.342 | 0.236 |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 2.46 | 3.34 |
| Benzo[a]pyrene | 1.54 | 1.88 |
| Benzo[b]fluoranthene | 1.68 | 2.07 |
| Chrysene | 2.5 | 3.11 |
| **Metals (mg/kg)** | | |
| Arsenic | 21.4 | 21.7 |
| Lead | 1120 | 829 |
| Mercury | 5.73 | 2.9 |

| | |
|---|---|
| Sample Name | GPEC-TP569 (6-7) |
| Start Depth | 6 |
| End Depth | 7 |
| Sample Date | 8/3/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.56 |
| Benzo[a]pyrene | 3.24 |
| Benzo[b]fluoranthene | 3.18 |
| Benzo[k]fluoranthene | 2.42 |
| Chrysene | 3.7 |
| **Metals (mg/kg)** | |
| Arsenic | 18.8 |
| Lead | 769 |

| | |
|---|---|
| Sample Name | GPEC-TP567 (10-11) |
| Start Depth | 10 |
| End Depth | 11 |
| Sample Date | 8/9/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Naphthalene | 21.5 |
| Benz[a]anthracene | 439 |
| Benzo[a]pyrene | 418 |
| Benzo[b]fluoranthene | 397 |
| Benzo[k]fluoranthene | 262 |
| Chrysene | 374 |
| Dibenz[a,h]anthracene | 90.3 |
| Indeno[1,2,3-cd]pyrene | 274 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 36.6 D |
| **Metals (mg/kg)** | |
| Arsenic | 41.3 |
| Lead | 2270 |
| Mercury | 1.49 |

| | |
|---|---|
| Sample Name | GPEC-SB511 (9-10) |
| Start Depth | 9 |
| End Depth | 10 |
| Sample Date | 1/15/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.89 |
| Benzo[a]pyrene | 3.37 |
| Benzo[b]fluoranthene | 2.86 |
| Benzo[k]fluoranthene | 2.49 |
| Chrysene | 3.69 |
| **Metals (mg/kg)** | |
| Mercury | 1.12 J |

***LEGEND***

- BORING LOCATION
- TEST PIT

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/ SULFER-LIKE ODOR
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND

0 40 80 160
SCALE: 1" = 80'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

SHALLOW SUBSURFACE SOIL
ANALYTICAL SUMMARY
(0-25 FT BGS)
AREA 6 & 9

June 2026 Plate 6

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Soil Analytical Shallow Areas 6 9_250327.mxd

| Sample Name | GPEC-TP421 |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 3 |
| Sample Date | 5/10/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **1.89 D** |
| Toluene | **3.58 D** |
| Ethylbenzene | **166 D** |
| Total Xylene | **255 D** |
| **PAHs (mg/kg)** | |
| Naphthalene | **195** |
| Benz[a]anthracene | **1.74** |
| Benzo[a]pyrene | **1.28** |
| Chrysene | **1.7** |
| **Metals (mg/kg)** | |
| Arsenic | **50.5** |
| Lead | **499** |
| Mercury | **1.4** |
| Selenium | **6.02** |

| Sample Name | GPEC-SB-11 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 4/27/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **11** |
| Benzo[a]pyrene | **12** |
| Benzo[b]fluoranthene | **9.3** |
| Benzo[k]fluoranthene | **3.5** |
| Chrysene | **11** |
| Dibenz[a,h]anthracene | **1.6** |
| **Metals (mg/kg)** | |
| Lead | **456** |
| Mercury | **1.9** |

| Sample Name | GPEC-SB-107 (4-5) |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 5/18/2010 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.056 J** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.92** |
| Benzo[a]pyrene | **1.73** |
| Chrysene | **1.65** |

| Sample Name | GPEC-SB410 | GPEC-SB410 |
|---|---|---|
| Start Depth (ft.) | 4 | 11 |
| End Depth (ft.) | 6 | 12 |
| Sample Date | 12/15/2016 | 1/26/2017 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **28.8** | **0.115** |
| Benzo[a]pyrene | **19.9** | **0.107** |
| Benzo[b]fluoranthene | **19.6** | **0.088** |
| Benzo[k]fluoranthene | **24.2** | **0.071** |
| Chrysene | **26.9** | **0.095** |
| Dibenz[a,h]anthracene | **3.03** | 0.039 U |
| **Metals (mg/kg)** | | |
| Lead | **525** | **74** |
| Manganese | **467** | **293** |
| Mercury | **1.26 J** | **0.135** |
| Nickel | **21.7** | **247** |

| Sample Name | GPEC-SB409 | GPEC-SBXX | GPEC-SB409 |
|---|---|---|---|
| Start Depth (ft.) | 1 | 1 | 11 |
| End Depth (ft.) | 2.5 | 2.5 | 12 |
| Sample Date | 12/16/2016 | 12/16/2016 | 1/10/2017 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Benzene | **0.124 J** | **0.115 J** | 3.28 U |
| Toluene | **0.252 J** | **0.248 J** | 3.28 U |
| Ethylbenzene | **0.441 J** | **0.419 J** | **70.1 D** |
| Total Xylene | **0.731 J** | **0.767 J** | **51 D** |
| **PAHs (mg/kg)** | | | |
| Acenaphthene | **0.206** | **0.316** | **169** |
| 2-Methylnaphthalene | **1.13** | **0.928** | **650** |
| Naphthalene | **1.23** | **1.07** | **966** |
| Benz[a]anthracene | **3.66** | **2.63** | **73.7** |
| Benzo[a]pyrene | **3.16** | **2.54** | **49.3** |
| Benzo[b]fluoranthene | **3.59** | **3.32** | **21.3** |
| Benzo[k]fluoranthene | **2.88** | **2.45** | **27.3** |
| Chrysene | **3.84** | **2.66** | **61.1** |
| Dibenz[a,h]anthracene | **1.07** | **0.738** | **6.31** |
| Indeno[1,2,3-cd]pyrene | **2.12** | **1.62** | **15** |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **0.127** | **0.138** | **28.4 D** |
| **Metals (mg/kg)** | | | |
| Arsenic | **16.8** | **22** | **11.7** |
| Cadmium | **10.3** | **9.32** | **0.728** |
| Mercury | **1.16 J** | **1.05 J** | **0.383** |

| Sample Name | GPEC-SB411 |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 12/16/2016 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.384 J** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.58** |
| Benzo[a]pyrene | **2.46** |
| Benzo[b]fluoranthene | **2.74** |
| Benzo[k]fluoranthene | **1.85** |
| Chrysene | **2.41** |
| **Metals (mg/kg)** | |
| Mercury | **1.47 J** |

| Sample Name | GPEC-SB-407 |
|---|---|
| Start Depth (ft.) | 5 |
| End Depth (ft.) | 5 |
| Sample Date | 12/19/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benzo[a]pyrene | **1.56** |
| Chrysene | **1.47** |
| **Metals (mg/kg)** | |
| Arsenic | **35.7** |
| Selenium | **33.7** |

| Sample Name | GPEC-SB408 |
|---|---|
| Start Depth (ft.) | 5 |
| End Depth (ft.) | 5 |
| Sample Date | 12/19/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **21** |
| Benzo[a]pyrene | **15.7** |
| Benzo[b]fluoranthene | **17.1** |
| Benzo[k]fluoranthene | **15.5** |
| Chrysene | **15.9** |
| Dibenz[a,h]anthracene | **2.4** |
| **Metals (mg/kg)** | |
| Mercury | **1.15 J** |

| Sample Name | GPEC-TP418 |
|---|---|
| Start Depth (ft.) | 4.5 |
| End Depth (ft.) | 5 |
| Sample Date | 5/12/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **6.61** |
| Benzo[a]pyrene | **8.44** |
| Benzo[b]fluoranthene | **6.51** |
| Benzo[k]fluoranthene | **6.67** |
| Chrysene | **6.4** |
| Dibenz[a,h]anthracene | **1.68** |
| **Metals (mg/kg)** | |
| Arsenic | **48.5** |
| Barium | **842** |
| Lead | **1020** |
| Mercury | **1.93** |

| Sample Name | GPEC-SB-12 (12-14) | GPEC-SB-12 (22-24) |
|---|---|---|
| Start Depth (ft.) | 12 | 22 |
| End Depth (ft.) | 14 | 24 |
| Sample Date | 6/1/2009 | 6/2/2009 |
| **Analyte** | | |
| Acetone | **0.036 J** | **0.19 J** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **2** | **1** |
| Benzo[a]pyrene | **1.9** | **1.2** |
| Benzo[b]fluoranthene | **2.1** | **1.5** |
| Chrysene | **2.1** | **1.4** |
| **Metals (mg/kg)** | | |
| Mercury | **2.5** | **0.86** |

| Sample Name | GPEC-SB402 | GPEC-SB402 |
|---|---|---|
| Start Depth (ft.) | 5 | 14 |
| End Depth (ft.) | 5 | 15 |
| Sample Date | 12/21/2016 | 1/5/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.639** | 0.078 U |
| **PAHs (mg/kg)** | | |
| Naphthalene | **0.166** | **12.6** |
| Benz[a]anthracene | **1.82** | **130** |
| Benzo[a]pyrene | **1.6** | **102** |
| Benzo[b]fluoranthene | **1.31** | **94.3** |
| Benzo[k]fluoranthene | **1.33** | **79.4** |
| Chrysene | **1.69** | **104** |
| Dibenz[a,h]anthracene | **0.455** | **26.1** |
| Indeno[1,2,3-cd]pyrene | **0.945** | **62.2** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.129** | **26.8 D** |
| **Metals (mg/kg)** | | |
| Arsenic | **8.44** | **28.7** |
| Cadmium | **0.697** | **9.9** |
| Lead | **1010** | **471** |
| Mercury | **2.93** | **0.691** |
| Zinc | **363** | **6010** |

| Sample Name | GPEC-SB405 | GPEC-SB405 |
|---|---|---|
| Start Depth (ft.) | 5 | 9 |
| End Depth (ft.) | 5 | 10 |
| Sample Date | 12/20/2016 | 1/6/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.317** | **0.526** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **1.23** | **5.05** |
| Benzo[a]pyrene | **1.01** | **4.52** |
| Benzo[b]fluoranthene | **1.02** | **4.63** |
| Benzo[k]fluoranthene | **0.765** | **2.98** |
| Chrysene | **1.13** | **4.44** |
| **Metals (mg/kg)** | | |
| Arsenic | **16.8** | **15** |
| Lead | **326** | **687** |
| Mercury | **6.49** | **15.6** |
| Zinc | **460** | **2800** |

| Sample Name | GPEC-SB400 | GPEC-SB400 |
|---|---|---|
| Start Depth (ft.) | 5 | 13 |
| End Depth (ft.) | 5 | 15 |
| Sample Date | 12/15/2016 | 1/3/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00594 UJ | **3.28 D** |
| Total Xylene | 0.012 UJ | **2.01 D** |
| **PAHs (mg/kg)** | | |
| Naphthalene | **0.098** | **62.2** |
| Benz[a]anthracene | **1.06** | **162** |
| Benzo[a]pyrene | **0.943** | **135** |
| Benzo[b]fluoranthene | **0.854** | **128** |
| Benzo[k]fluoranthene | **0.866** | **135** |
| Chrysene | **0.923** | **143** |
| Dibenz[a,h]anthracene | **0.293** | **22** |
| Indeno[1,2,3-cd]pyrene | **0.527** | **36.5** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **0.1** | **47.8 D** |
| **Metals (mg/kg)** | | |
| Arsenic | **20.4** | **20.5** |
| Barium | **1820** | **211** |
| Cadmium | **2.46** | **4.57** |
| Copper | **430** | **4740** |
| Lead | **1000** | **503** |
| Mercury | **3.44 J** | **0.614** |
| Zinc | **4480** | **3170** |

| Sample Name | GPEC-TP405 |
|---|---|
| Start Depth (ft.) | 6.5 |
| End Depth (ft.) | 7 |
| Sample Date | 4/22/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **5.29** |
| Benzo[a]pyrene | **3.34** |
| Benzo[b]fluoranthene | **2.69** |
| Benzo[k]fluoranthene | **3.59** |
| Chrysene | **5.11** |

| Sample Name | GPEC-TP407 |
|---|---|
| Start Depth (ft.) | 6.5 |
| End Depth (ft.) | 7 |
| Sample Date | 4/29/2016 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.786 D** |
| Ethylbenzene | **1.74 D** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.87** |
| Benzo[a]pyrene | **1.12** |
| Chrysene | **2.28** |
| **Metals (mg/kg)** | |
| Arsenic | **237** |
| Lead | **1230** |

| Sample Name | GPEC-SB-10 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 4/3/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **19** |
| Benzo[a]pyrene | **19** |
| Benzo[b]fluoranthene | **16** |
| Benzo[k]fluoranthene | **6** |
| Chrysene | **19** |
| Dibenz[a,h]anthracene | **3.1** |
| Indeno[1,2,3-cd]pyrene | **13** |
| **Metals (mg/kg)** | |
| Lead | **834** |
| Mercury | **1.6** |

| Sample Name | GPEC-SB406 |
|---|---|
| Start Depth (ft.) | 5 |
| End Depth (ft.) | 5 |
| Sample Date | 12/19/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.29** |
| Benzo[a]pyrene | **2.48** |
| Benzo[b]fluoranthene | **2.12** |
| Benzo[k]fluoranthene | **2.7** |
| Chrysene | **2.67** |

| Sample Name | GPEC-SB-6 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 3/31/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benzo[a]pyrene | **1.3** |
| Chrysene | **1.1** |
| **Metals (mg/kg)** | |
| Mercury | **1.2** |

| Sample Name | GPEC-SB-7 (3-4) | GPEC-SB-7 (7-8) |
|---|---|---|
| Start Depth (ft.) | 3 | 7 |
| End Depth (ft.) | 4 | 8 |
| Sample Date | 3/31/2009 | 3/31/2009 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **5.2** | **23** |
| Benzo[a]pyrene | **6.8** | **25** |
| Benzo[b]fluoranthene | **5.2** | **23** |
| Benzo[k]fluoranthene | **1.7** | **9.6** |
| Chrysene | **5.9** | **24** |
| Dibenz[a,h]anthracene | **0.88** | **5.1** |
| Indeno[1,2,3-cd]pyrene | **3** | **21** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | 0.62 U | **8** |
| 2-Methylphenol (o-Cresc | 0.62 U | **0.38 J** |
| Phenol | 0.62 U | **0.57 J** |
| **Metals (mg/kg)** | | |
| Mercury | **1.6** | **0.53** |

| Sample Name | GPEC-TP419 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 4.5 |
| Sample Date | 5/12/2016 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.065 J** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.2** |
| Benzo[a]pyrene | **1.46** |
| Chrysene | **1.2** |

| Sample Name | GPEC-SB413 | GPEC-SB413 |
|---|---|---|
| Start Depth (ft.) | 5 | 9 |
| End Depth (ft.) | 5 | 10 |
| Sample Date | 12/21/2016 | 1/19/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.122** | **0.117** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **26.7** | **4.45** |
| Benzo[a]pyrene | **18.9** | **4.14** |
| Benzo[b]fluoranthene | **16.5** | **2.36** |
| Benzo[k]fluoranthene | **14** | **2.29** |
| Chrysene | **21.1** | **4.13** |
| Dibenz[a,h]anthracene | **3.61** | **0.617** |
| Indeno[1,2,3-cd]pyrene | **10.9** | **1.81** |

GPEC-TP538
GPEC-TP539
GPEC-SB533
GPEC-SB528
GPEC-SB526
GPEC-SB521
GPEC-TP530
GPEC-SB5
GPEC-TP524
GPEC-TP518
GPEC-SB04
GPEC-MW4D
GPEC-SB107/MW
GPEC-SB11/MW-11
GPEC-SB401
GPEC-SB12/MW-12
GPEC-SB402
GPEC-TP415
GPEC-SB410
GPEC-SB412
GPEC-TP414
GPEC-SB411
GPEC-SB409
GPEC-TP413
GPEC-TP412
GPEC-TP416
GPEC-TP418
GPEC-TP420
GPEC-SB413
GPEC-SB07/MW-7D
GPEC-TP419
GPEC-SB221
GPEC-SB405
GPEC-TP407
GPEC-SB404
GPEC-TP408
GPEC-TP421
GPEC-TP411
GPEC-SB407
GPEC-SB406
GPEC-TP409
GPEC-SB408
GPEC-TP417
GPEC-SIS-5 (PZ)
GPEC-TP401
GPEC-TP402
GPEC-TP400
GPEC-SIS-4 (PZ)
GPEC-SIS-3 (PZ)
GPEC-SIS-2 (PZ)
GPEC-SIS-1
GPEC-SB10/MW-10
GPEC-SB06/MW-6
GPEC-SB02/MW-2
GPEC-SB121
GPEC-SB118
GPEC-SB201/MW201
GPEC-SB115
GPEC-SB400
GPEC-SB122
GPEC-SB116
GPEC-SB119
GPEC-TP405
GPEC-TP406
GPEC-SB403
GPEC-SB/PZ329
GPEC-TP403
GPEC-SB/PZ320
GPEC-SB120
GPEC-SB117
AREA 3
GPEC-SB/PZ346
GPEC-TP311
GPEC-SB/PZ322
GPEC-SB/PZ323
GPEC-SB101A
GPEC-SB109/MW-101WT
GPEC-SB10
GPEC-SB405
GPEC-MW
GPEC-TP312
GPEC-SB/PZ314
GPEC-SB321
GPEC-TP304-305
GPEC-TP303
GPEC-TP302
GPEC-TP301
GPEC-SB324
GPEC-SB/PZ325
GPEC-TP306
GPEC-SB352
GPEC-TP313
GPEC-TP310
GPEC-SB315
GPEC-TP309
AREA 4
GPEC-TP314
GPEC-GT04D (MW)
GPEC-SB308A
GPEC-SB308
GPEC-SB345
GPEC-GT01 (MW)
GPEC-GT1S
GPEC-SB319
GPEC-GT03 (MW)
GPEC-SB02D

***LEGEND***

- BORING LOCATION
- TEST PIT

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/ SULFER-LIKE ODOR
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND

0 30 60 120
SCALE: 1" = 80'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

SHALLOW SUBSURFACE SOIL
ANALYTICAL SUMMARY
(0-25 FT BGS)
AREA 7

June 2026

Plate 7

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Soil Analytical Shallow Area 7_241119_250409.mxd

| Sample Name | GPEC-TP566 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 9/21/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 91.6 |
| Benzo[a]pyrene | 10.7 |
| Benzo[b]fluoranthene | 35.9 |
| Benzo[k]fluoranthene | 45.8 |
| Chrysene | 113 |
| Dibenz[a,h]anthracene | 10.5 |
| Indeno[1,2,3-cd]pyrene | 27.7 |
| **Metals (mg/kg)** | |
| Arsenic | 26.5 |
| Lead | 550 |
| Mercury | 4.02 |

| Sample Name | GPEC-TP565 |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 9/11/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Naphthalene | 16 |
| Benz[a]anthracene | 32.6 |
| Benzo[a]pyrene | 13.8 |
| Benzo[b]fluoranthene | 16.5 |
| Benzo[k]fluoranthene | 17.2 |
| Chrysene | 37.7 |
| Dibenz[a,h]anthracene | 4.51 |
| Indeno[1,2,3-cd]pyrene | 11.4 |

| Sample Name | GPEC-SB537/MW537 |
|---|---|
| Start Depth (ft.) | 0 |
| End Depth (ft.) | 1 |
| Sample Date | 3/15/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.56 |
| Benzo[a]pyrene | 2.55 |
| Benzo[b]fluoranthene | 1.95 |
| Benzo[k]fluoranthene | 1.8 |
| Chrysene | 2.68 |
| **Metals (mg/kg)** | |
| Arsenic | 19.5 |
| Selenium | 5.16 |

| Sample Name | GPEC-TP562 |
|---|---|
| Start Depth (ft.) | 0 |
| End Depth (ft.) | 1 |
| Sample Date | 9/7/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.19 |
| Benzo[a]pyrene | 1.86 |
| Benzo[b]fluoranthene | 1.8 |
| Benzo[k]fluoranthene | 1.75 |
| Chrysene | 2.65 |
| Dibenz[a,h]anthracene | 0.648 |
| Indeno[1,2,3-cd]pyrene | 1.72 |
| **Metals (mg/kg)** | |
| Arsenic | 13.4 |
| Lead | 279 |
| Mercury | 0.762 |
| Nickel | 145000 D |
| Zinc | 11600 |

| Sample Name | GPEC-TP563 |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 9/13/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 7.43 |
| Benzo[a]pyrene | 6.56 |
| Benzo[b]fluoranthene | 4.67 |
| Benzo[k]fluoranthene | 4.06 |
| Chrysene | 6.34 |
| Dibenz[a,h]anthracene | 1.75 |
| **Metals (mg/kg)** | |
| Nickel | 1820 |

| Sample Name | GPEC-TP528 (6-7) |
|---|---|
| Start Depth (ft.) | 6 |
| End Depth (ft.) | 7 |
| Sample Date | 12/1/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Toluene | 14.9 D |
| Ethylbenzene | 214 D |
| Total Xylene | 220 D |
| **PAHs (mg/kg)** | |
| Acenaphthylene | 236 |
| 2-Methylnaphthalene | 628 |
| Naphthalene | 2250 |
| Benz[a]anthracene | 87.4 |
| Benzo[a]pyrene | 70.3 |
| Benzo[b]fluoranthene | 32.7 |
| Benzo[k]fluoranthene | 35.3 |
| Chrysene | 74.9 |
| Dibenz[a,h]anthracene | 7.8 |
| Indeno[1,2,3-cd]pyrene | 23.1 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 16.7 D |
| 2,4-Dinitrophenol | 1.1 DJ |

| Sample Name | GPEC-TP546 | GPEC-TP-XX-10252017 |
|---|---|---|
| Start Depth (ft.) | 2.5 | 2.5 |
| End Depth (ft.) | 3 | 3 |
| Sample Date | 10/25/2017 | 10/25/2017 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 4.7 | 2.55 |
| Benzo[a]pyrene | 2.03 | 1.45 |
| Benzo[k]fluoranthene | 2.02 | 1.3 |
| Chrysene | 5.11 | 2.93 |

| Sample Name | GPEC-SB532 |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 3/6/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.65 |
| Benzo[a]pyrene | 3.12 |
| Benzo[b]fluoranthene | 3.15 |
| Benzo[k]fluoranthene | 2.05 |
| Chrysene | 2.96 |
| Dibenz[a,h]anthracene | 1.04 |
| Indeno[1,2,3-cd]pyrene | 2.34 |
| **Metals (mg/kg)** | |
| Selenium | 5.14 |

| Sample Name | GPEC-TP545 (9-10) |
|---|---|
| Start Depth (ft.) | 9 |
| End Depth (ft.) | 10 |
| Sample Date | 9/25/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 5.52 |
| Benzo[a]pyrene | 5.04 |
| Benzo[b]fluoranthene | 3.14 |
| Benzo[k]fluoranthene | 3.83 |
| Chrysene | 5.7 |
| Indeno[1,2,3-cd]pyrene | 2.93 |
| **Metals (mg/kg)** | |
| Arsenic | 16.8 |
| Mercury | 2.18 |

| Sample Name | GPEC-SB533 |
|---|---|
| Start Depth (ft.) | 5 |
| End Depth (ft.) | 5 |
| Sample Date | 3/20/2019 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| 1,2-Dichloroethane | 0.00133 U |
| **PAHs (mg/kg)** | |
| Naphthalene | 0.143 |
| Benz[a]anthracene | 1.58 |
| Benzo[a]pyrene | 1.83 |
| Benzo[b]fluoranthene | 1.59 |
| Benzo[k]fluoranthene | 1.4 |
| Chrysene | 1.68 |
| Dibenz[a,h]anthracene | 0.623 |
| Indeno[1,2,3-cd]pyrene | 1.29 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 0.167 |
| **Metals (mg/kg)** | |
| Arsenic | 13.5 |
| Lead | 283 |
| Mercury | 2.25 |
| Nickel | 25.7 |
| Selenium | 4.16 U |

| Sample Name | GPEC-SB517 |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 3/19/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.31 |
| Benzo[a]pyrene | 1.26 |
| Chrysene | 1.27 |
| **Metals (mg/kg)** | |
| Selenium | 4.19 J |

| Sample Name | GPEC-SB516 (15.5-16.5) |
|---|---|
| Start Depth (ft.) | 15.5 |
| End Depth (ft.) | 16.5 |
| Sample Date | 4/3/2019 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.00107 U |
| Toluene | 0.00107 U |
| Ethylbenzene | 0.00107 U |
| Total Xylene | 0.00214 U |
| **Other VOCs (mg/kg)** | |
| Acetone | 0.076 |
| 1,2-Dichloroethane | 0.00107 U |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | 0.674 |
| Naphthalene | 1.44 |
| Phenanthrene | 26.1 |
| Pyrene | 22.6 |
| Benz[a]anthracene | 10.1 |
| Benzo[a]pyrene | 9.39 |
| Benzo[b]fluoranthene | 9.15 |
| Benzo[k]fluoranthene | 5.22 |
| Chrysene | 10 |
| Dibenz[a,h]anthracene | 3.1 |
| Indeno[1,2,3-cd]pyrene | 6.02 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 1.69 D |
| **Metals (mg/kg)** | |
| Arsenic | 23.4 |
| Lead | 1880 |
| Manganese | 293 |
| Mercury | 1.44 |
| Nickel | 29 |
| Selenium | 2.65 J |

| Sample Name | GPEC-SB518 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 3/12/2019 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.754 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.45 |
| Benzo[a]pyrene | 3.59 |
| Benzo[b]fluoranthene | 3.39 |
| Benzo[k]fluoranthene | 2.22 |
| Chrysene | 3.53 |
| **Metals (mg/kg)** | |
| Lead | 459 |
| Mercury | 0.936 |
| Selenium | 4.82 |

| Sample Name | GPEC-TP524 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 9/28/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | 92.6 |
| Naphthalene | 169 |
| Benz[a]anthracene | 7.39 |
| Benzo[a]pyrene | 5.23 |
| Benzo[b]fluoranthene | 2.14 |
| Benzo[k]fluoranthene | 3.08 |
| Chrysene | 7.08 |
| **Metals (mg/kg)** | |
| Lead | 505 |
| Mercury | 1.4 |

| Sample Name | GPEC-TP529 (7-8) |
|---|---|
| Start Depth (ft.) | 7 |
| End Depth (ft.) | 8 |
| Sample Date | 9/29/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | 3.05 D |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.27 |
| Benzo[a]pyrene | 2.94 |
| Benzo[b]fluoranthene | 2.64 |
| Benzo[k]fluoranthene | 2 |
| Chrysene | 3.66 |

| Sample Name | GPEC-SB519 | GPEC-SB519 |
|---|---|---|
| Start Depth (ft.) | 3 | 15.7 |
| End Depth (ft.) | 4 | 16.7 |
| Sample Date | 3/12/2019 | 4/1/2019 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00212 | 3.33 D |
| Ethylbenzene | 0.00117 U | 263 D |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | 0.079 | 332 |
| Naphthalene | 0.099 | 1190 |
| Benz[a]anthracene | 2.73 | 20.2 |
| Benzo[a]pyrene | 2.97 | 17.7 |
| Benzo[b]fluoranthene | 2.56 | 8.05 |
| Benzo[k]fluoranthene | 2.6 | 11.1 |
| Chrysene | 2.79 | 18.7 |
| Dibenz[a,h]anthracene | 0.824 | 2.73 |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | 0.08 U | 6.54 D |
| **Metals (mg/kg)** | | |
| Arsenic | 17.6 | 1.52 |
| Lead | 5170 | 3.16 |
| Mercury | 1.95 | 0.0279 U |

| Sample Name | GPEC-TP523 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 12/4/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 5.33 D |
| Toluene | 1.8 D |
| Ethylbenzene | 7.93 D |
| Total Xylene | 9.53 D |
| **Other VOCs (mg/kg)** | |
| **PAHs (mg/kg)** | |
| Naphthalene | 39.9 |
| Benz[a]anthracene | 97.2 |
| Benzo[a]pyrene | 61.5 |
| Benzo[b]fluoranthene | 39.8 |
| Benzo[k]fluoranthene | 29.5 |
| Chrysene | 91.9 |
| Dibenz[a,h]anthracene | 10.3 |
| Indeno[1,2,3-cd]pyrene | 23.9 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 11.7 D |
| **Metals (mg/kg)** | |
| Lead | 541 |
| Mercury | 1.35 |

| Sample Name | GPEC-SB521 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 3/13/2019 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 4.08 D |
| Toluene | 2.96 D |
| Ethylbenzene | 4.51 D |
| Total Xylene | 8.7 D |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | 42.6 |
| Naphthalene | 85.2 |
| Benz[a]anthracene | 9.36 |
| Benzo[a]pyrene | 8.3 |
| Benzo[b]fluoranthene | 5.47 |
| Benzo[k]fluoranthene | 4.93 |
| Chrysene | 10.7 |
| Dibenz[a,h]anthracene | 2.49 |
| Indeno[1,2,3-cd]pyrene | 4.49 |
| **Metals (mg/kg)** | |
| Lead | 597 |
| Mercury | 1.21 |
| Selenium | 4.8 |

| Sample Name | GPEC-TP527 |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 10/25/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 1.19 |
| Toluene | 0.756 |
| Ethylbenzene | 1.23 |
| Total Xylene | 1.94 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 29.7 |
| Benzo[a]pyrene | 18.7 |
| Benzo[b]fluoranthene | 12.4 |
| Benzo[k]fluoranthene | 13.5 |
| Chrysene | 37.9 |
| Dibenz[a,h]anthracene | 3.76 |
| Indeno[1,2,3-cd]pyrene | 9.59 |
| **Metals (mg/kg)** | |
| Arsenic | 41.3 |
| Lead | 2650 |
| Mercury | 1.55 J |

| Sample Name | GPEC-SB520 | GPEC-SB520 |
|---|---|---|
| Start Depth (ft.) | 3 | 19.5 |
| End Depth (ft.) | 4 | 20 |
| Sample Date | 3/13/2019 | 3/26/2019 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 9.23 D | 5.52 U |
| Toluene | 1.38 D | 20.1 D |
| Ethylbenzene | 6.75 D | 40.7 D |
| Total Xylene | 5.18 D | 116 D |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | 2.31 | 404 |
| Naphthalene | 31.5 | 1180 |
| Pyrene | 59.5 | 35.2 |
| Benz[a]anthracene | 25.8 | 10.2 |
| Benzo[a]pyrene | 24.7 | 10.3 |
| Benzo[b]fluoranthene | 11.4 | 4.28 |
| Benzo[k]fluoranthene | 15.8 | 6.04 |
| Chrysene | 27.8 | 10.1 |
| Dibenz[a,h]anthracene | 5.22 | 2.2 |
| **Metals (mg/kg)** | | |
| Arsenic | 9.72 | 1.02 |
| Lead | 621 | 2.6 |
| Manganese | 264 | 390 |
| Selenium | 4.68 | 4.16 U |

AREA 6

AREA 8

GPEC-SB503 GPEC-SB/MW537 GPEC-SB/MW538 GPEC-TP566 GPEC-TP565 GPEC-TP564 GPEC-TP562 GPEC-TP563 GPEC-SB536 GPEC-SB709 GPEC-TP561 GPEC-TP560 GPEC-SB535 GPEC-SB708 GPEC-TP559 GPEC-SB706 GPEC-TP556 GPEC-SB534 GPEC-TP546 GPEC-SB532 GPEC-TP545 GPEC-TP544 GPEC-SB705 GPEC-TP555 GPEC-TP554 GPEC-TP553 GPEC-TP552 GPEC-TP551 GPEC-SB531 GPEC-TP548 GPEC-TP547 GPEC-TP549 GPEC-TP550 GPEC-SB530 GPEC-SB801 GPEC-SB802 GPEC-TP543 GPEC-TP542 GPEC-SB529 GPEC-TP538 GPEC-TP534 GPEC-SB527 GPEC-SB528 GPEC-TP539 GPEC-SB08/MW-8 GPEC-TP532 GPEC-TP533 GPEC-SB526 GPEC-TP541 GPEC-TP525 GPEC-SB525 GPEC-SB524 GPEC-TP517 GPEC-TP518 GPEC-TP528 GPEC-SB521 GPEC-TP527 GPEC-SB522 GPEC-SB523 GPEC-TP520 GPEC-TP526 GPEC-TP523 GPEC-TP522 GPEC-SB520 GPEC-SB519 GPEC-TP529 GPEC-TP530 GPEC-SB518 GPEC-TP524 GPEC-SB516 GPEC-TP535 GPEC-SB517 GPEC-TP531 GPEC-SB533 GPEC-MW401 GPEC-TP537 GPEC-TP536 GPEC-SB/PZ343 GPEC-TP325 GPEC-SB350 GPEC-SB318 GPEC-TP325EX GPEC-SB/PZ342 GPEC-TP400 GPEC-TP401 GPEC-TP402 GPEC-SB401 GPEC-TP415 GPEC-SB409 GPEC-TP414 GPEC-TP413 GPEC-SB406 GPEC-TP409 GPEC-TP418 GPEC-SB413 GPEC-TP419 GPEC-SB804 GPEC-MW4D GPEC-SB803 GPEC-SB211 GPEC-SB210 GPEC-SB212 GPEC-SB216 GPEC-SB215 GPEC-SB214 GPEC-SB409 GPEC-SB410 GPEC-SB411 GPEC-SB412 GPEC-SB414 GPEC-SB415 GPEC-SB416 GPEC-SB417 GPEC-SB418 GPEC-SB419 GPEC-SB420 GPEC-SB421 GPEC-SB422 GPEC-SB423 GPEC-SB424 GPEC-SB425 GPEC-SB426 GPEC-SB427 GPEC-SB428 GPEC-SB429 GPEC-SB430 GPEC-SB431 GPEC-SB432 GPEC-SB433 GPEC-SB434 GPEC-SB435 GPEC-SB436 GPEC-SB437 GPEC-SB438 GPEC-SB439 GPEC-SB440 GPEC-SB441 GPEC-SB442 GPEC-SB443 GPEC-SB444 GPEC-SB445 GPEC-SB446 GPEC-SB447 GPEC-SB448 GPEC-SB449 GPEC-SB450 GPEC-SB451 GPEC-SB452 GPEC-SB453 GPEC-SB454 GPEC-SB455 GPEC-SB456 GPEC-SB457 GPEC-SB458 GPEC-SB459 GPEC-SB460 GPEC-SB461 GPEC-SB462 GPEC-SB463 GPEC-SB464 GPEC-SB465 GPEC-SB466 GPEC-SB467 GPEC-SB468 GPEC-SB469 GPEC-SB470 GPEC-SB471 GPEC-SB472 GPEC-SB473 GPEC-SB474 GPEC-SB475 GPEC-SB476 GPEC-SB477 GPEC-SB478 GPEC-SB479 GPEC-SB480 GPEC-SB481 GPEC-SB482 GPEC-SB483 GPEC-SB484 GPEC-SB485 GPEC-SB486 GPEC-SB487 GPEC-SB488 GPEC-SB489 GPEC-SB490 GPEC-SB491 GPEC-SB492 GPEC-SB493 GPEC-SB494 GPEC-SB495 GPEC-SB496 GPEC-SB497 GPEC-SB498 GPEC-SB499 GPEC-SB500 GPEC-SB501 GPEC-SB502 GPEC-SB503 GPEC-SB504 GPEC-SB505 GPEC-SB506 GPEC-SB507 GPEC-SB508 GPEC-SB509 GPEC-SB510 GPEC-SB511 GPEC-SB512 GPEC-SB513 GPEC-SB514 GPEC-SB515 GPEC-SB516 GPEC-SB517 GPEC-SB518 GPEC-SB519 GPEC-SB520 GPEC-SB521 GPEC-SB522 GPEC-SB523 GPEC-SB524 GPEC-SB525 GPEC-SB526 GPEC-SB527 GPEC-SB528 GPEC-SB529 GPEC-SB530 GPEC-SB531 GPEC-SB532 GPEC-SB533 GPEC-SB534 GPEC-SB535 GPEC-SB536 GPEC-SB537 GPEC-SB538 GPEC-SB539 GPEC-SB540 GPEC-SB541 GPEC-SB542 GPEC-SB543 GPEC-SB544 GPEC-SB545 GPEC-SB546 GPEC-SB547 GPEC-SB548 GPEC-SB549 GPEC-SB550 GPEC-SB551 GPEC-SB552 GPEC-SB553 GPEC-SB554 GPEC-SB555 GPEC-SB556 GPEC-SB557 GPEC-SB558 GPEC-SB559 GPEC-SB560 GPEC-SB561 GPEC-SB562 GPEC-SB563 GPEC-SB564 GPEC-SB565 GPEC-SB566 GPEC-SB567 GPEC-SB568 GPEC-SB569 GPEC-SB570 GPEC-SB571 GPEC-SB572 GPEC-SB573 GPEC-SB574 GPEC-SB575 GPEC-SB576 GPEC-SB577 GPEC-SB578 GPEC-SB579 GPEC-SB580 GPEC-SB581 GPEC-SB582 GPEC-SB583 GPEC-SB584 GPEC-SB585 GPEC-SB586 GPEC-SB587 GPEC-SB588 GPEC-SB589 GPEC-SB590 GPEC-SB591 GPEC-SB592 GPEC-SB593 GPEC-SB594 GPEC-SB595 GPEC-SB596 GPEC-SB597 GPEC-SB598 GPEC-SB599 GPEC-SB600 GPEC-SB601 GPEC-SB602 GPEC-SB603 GPEC-SB604 GPEC-SB605 GPEC-SB606 GPEC-SB607 GPEC-SB608 GPEC-SB609 GPEC-SB610 GPEC-SB611 GPEC-SB612 GPEC-SB613 GPEC-SB614 GPEC-SB615 GPEC-SB616 GPEC-SB617 GPEC-SB618 GPEC-SB619 GPEC-SB620 GPEC-SB621 GPEC-SB622 GPEC-SB623 GPEC-SB624 GPEC-SB625 GPEC-SB626 GPEC-SB627 GPEC-SB628 GPEC-SB629 GPEC-SB630 GPEC-SB631 GPEC-SB632 GPEC-SB633 GPEC-SB634 GPEC-SB635 GPEC-SB636 GPEC-SB637 GPEC-SB638 GPEC-SB639 GPEC-SB640 GPEC-SB641 GPEC-SB642 GPEC-SB643 GPEC-SB644 GPEC-SB645 GPEC-SB646 GPEC-SB647 GPEC-SB648 GPEC-SB649 GPEC-SB650 GPEC-SB651 GPEC-SB652 GPEC-SB653 GPEC-SB654 GPEC-SB655 GPEC-SB656 GPEC-SB657 GPEC-SB658 GPEC-SB659 GPEC-SB660 GPEC-SB661 GPEC-SB662 GPEC-SB663 GPEC-SB664 GPEC-SB665 GPEC-SB666 GPEC-SB667 GPEC-SB668 GPEC-SB669 GPEC-SB670 GPEC-SB671 GPEC-SB672 GPEC-SB673 GPEC-SB674 GPEC-SB675 GPEC-SB676 GPEC-SB677 GPEC-SB678 GPEC-SB679 GPEC-SB680 GPEC-SB681 GPEC-SB682 GPEC-SB683 GPEC-SB684 GPEC-SB685 GPEC-SB686 GPEC-SB687 GPEC-SB688 GPEC-SB689 GPEC-SB690 GPEC-SB691 GPEC-SB692 GPEC-SB693 GPEC-SB694 GPEC-SB695 GPEC-SB696 GPEC-SB697 GPEC-SB698 GPEC-SB699 GPEC-SB700 GPEC-SB701 GPEC-SB702 GPEC-SB703 GPEC-SB704 GPEC-SB705 GPEC-SB706 GPEC-SB707 GPEC-SB708 GPEC-SB709 GPEC-SB710 GPEC-SB711 GPEC-SB712 GPEC-SB713 GPEC-SB714 GPEC-SB715 GPEC-SB716 GPEC-SB717 GPEC-SB718 GPEC-SB719 GPEC-SB720 GPEC-SB721 GPEC-SB722 GPEC-SB723 GPEC-SB724 GPEC-SB725 GPEC-SB726 GPEC-SB727 GPEC-SB728 GPEC-SB729 GPEC-SB730 GPEC-SB731 GPEC-SB732 GPEC-SB733 GPEC-SB734 GPEC-SB735 GPEC-SB736 GPEC-SB737 GPEC-SB738 GPEC-SB739 GPEC-SB740 GPEC-SB741 GPEC-SB742 GPEC-SB743 GPEC-SB744 GPEC-SB745 GPEC-SB746 GPEC-SB747 GPEC-SB748 GPEC-SB749 GPEC-SB750 GPEC-SB751 GPEC-SB752 GPEC-SB753 GPEC-SB754 GPEC-SB755 GPEC-SB756 GPEC-SB757 GPEC-SB758 GPEC-SB759 GPEC-SB760 GPEC-SB761 GPEC-SB762 GPEC-SB763 GPEC-SB764 GPEC-SB765 GPEC-SB766 GPEC-SB767 GPEC-SB768 GPEC-SB769 GPEC-SB770 GPEC-SB771 GPEC-SB772 GPEC-SB773 GPEC-SB774 GPEC-SB775 GPEC-SB776 GPEC-SB777 GPEC-SB778 GPEC-SB779 GPEC-SB780 GPEC-SB781 GPEC-SB782 GPEC-SB783 GPEC-SB784 GPEC-SB785 GPEC-SB786 GPEC-SB787 GPEC-SB788 GPEC-SB789 GPEC-SB790 GPEC-SB791 GPEC-SB792 GPEC-SB793 GPEC-SB794 GPEC-SB795 GPEC-SB796 GPEC-SB797 GPEC-SB798 GPEC-SB799 GPEC-SB800 GPEC-SB801 GPEC-SB802 GPEC-SB803 GPEC-SB804 GPEC-SB805 GPEC-SB806 GPEC-SB807 GPEC-SB808 GPEC-SB809 GPEC-SB810 GPEC-SB811 GPEC-SB812 GPEC-SB813 GPEC-SB814 GPEC-SB815 GPEC-SB816 GPEC-SB817 GPEC-SB818 GPEC-SB819 GPEC-SB820 GPEC-SB821 GPEC-SB822 GPEC-SB823 GPEC-SB824 GPEC-SB825 GPEC-SB826 GPEC-SB827 GPEC-SB828 GPEC-SB829 GPEC-SB830 GPEC-SB831 GPEC-SB832 GPEC-SB833 GPEC-SB834 GPEC-SB835 GPEC-SB836 GPEC-SB837 GPEC-SB838 GPEC-SB839 GPEC-SB840 GPEC-SB841 GPEC-SB842 GPEC-SB843 GPEC-SB844 GPEC-SB845 GPEC-SB846 GPEC-SB847 GPEC-SB848 GPEC-SB849 GPEC-SB850 GPEC-SB851 GPEC-SB852 GPEC-SB853 GPEC-SB854 GPEC-SB855 GPEC-SB856 GPEC-SB857 GPEC-SB858 GPEC-SB859 GPEC-SB860 GPEC-SB861 GPEC-SB862 GPEC-SB863 GPEC-SB864 GPEC-SB865 GPEC-SB866 GPEC-SB867 GPEC-SB868 GPEC-SB869 GPEC-SB870 GPEC-SB871 GPEC-SB872 GPEC-SB873 GPEC-SB874 GPEC-SB875 GPEC-SB876 GPEC-SB877 GPEC-SB878 GPEC-SB879 GPEC-SB880 GPEC-SB881 GPEC-SB882 GPEC-SB883 GPEC-SB884 GPEC-SB885 GPEC-SB886 GPEC-SB887 GPEC-SB888 GPEC-SB889 GPEC-SB890 GPEC-SB891 GPEC-SB892 GPEC-SB893 GPEC-SB894 GPEC-SB895 GPEC-SB896 GPEC-SB897 GPEC-SB898 GPEC-SB899 GPEC-SB900 GPEC-SB901 GPEC-SB902 GPEC-SB903 GPEC-SB904 GPEC-SB905 GPEC-SB906 GPEC-SB907 GPEC-SB908 GPEC-SB909 GPEC-SB910 GPEC-SB911 GPEC-SB912 GPEC-SB913 GPEC-SB914 GPEC-SB915 GPEC-SB916 GPEC-SB917 GPEC-SB918 GPEC-SB919 GPEC-SB920 GPEC-SB921 GPEC-SB922 GPEC-SB923 GPEC-SB924 GPEC-SB925 GPEC-SB926 GPEC-SB927 GPEC-SB928 GPEC-SB929 GPEC-SB930 GPEC-SB931 GPEC-SB932 GPEC-SB933 GPEC-SB934 GPEC-SB935 GPEC-SB936 GPEC-SB937 GPEC-SB938 GPEC-SB939 GPEC-SB940 GPEC-SB941 GPEC-SB942 GPEC-SB943 GPEC-SB944 GPEC-SB945 GPEC-SB946 GPEC-SB947 GPEC-SB948 GPEC-SB949 GPEC-SB950 GPEC-SB951 GPEC-SB952 GPEC-SB953 GPEC-SB954 GPEC-SB955 GPEC-SB956 GPEC-SB957 GPEC-SB958 GPEC-SB959 GPEC-SB960 GPEC-SB961 GPEC-SB962 GPEC-SB963 GPEC-SB964 GPEC-SB965 GPEC-SB966 GPEC-SB967 GPEC-SB968 GPEC-SB969 GPEC-SB970 GPEC-SB971 GPEC-SB972 GPEC-SB973 GPEC-SB974 GPEC-SB975 GPEC-SB976 GPEC-SB977 GPEC-SB978 GPEC-SB979 GPEC-SB980 GPEC-SB981 GPEC-SB982 GPEC-SB983 GPEC-SB984 GPEC-SB985 GPEC-SB986 GPEC-SB987 GPEC-SB988 GPEC-SB989 GPEC-SB990 GPEC-SB991 GPEC-SB992 GPEC-SB993 GPEC-SB994 GPEC-SB995 GPEC-SB996 GPEC-SB997 GPEC-SB998 GPEC-SB999 GPEC-SB1000 GPEC-SB1001 GPEC-SB1002 GPEC-SB1003 GPEC-SB1004 GPEC-SB1005 GPEC-SB1006 GPEC-SB1007 GPEC-SB1008 GPEC-SB1009 GPEC-SB1010 GPEC-SB1011 GPEC-SB1012 GPEC-SB1013 GPEC-SB1014 GPEC-SB1015 GPEC-SB1016 GPEC-SB1017 GPEC-SB1018 GPEC-SB1019 GPEC-SB1020 GPEC-SB1021 GPEC-SB1022 GPEC-SB1023 GPEC-SB1024 GPEC-SB1025 GPEC-SB1026 GPEC-SB1027 GPEC-SB1028 GPEC-SB1029 GPEC-SB1030 GPEC-SB1031 GPEC-SB1032 GPEC-SB1033 GPEC-SB1034 GPEC-SB1035 GPEC-SB1036 GPEC-SB1037 GPEC-SB1038 GPEC-SB1039 GPEC-SB1040 GPEC-SB1041 GPEC-SB1042 GPEC-SB1043 GPEC-SB1044 GPEC-SB1045 GPEC-SB1046 GPEC-SB1047 GPEC-SB1048 GPEC-SB1049 GPEC-SB1050 GPEC-SB1051 GPEC-SB1052 GPEC-SB1053 GPEC-SB1054 GPEC-SB1055 GPEC-SB1056 GPEC-SB1057 GPEC-SB1058 GPEC-SB1059 GPEC-SB1060 GPEC-SB1061 GPEC-SB1062 GPEC-SB1063 GPEC-SB1064 GPEC-SB1065 GPEC-SB1066 GPEC-SB1067 GPEC-SB1068 GPEC-SB1069 GPEC-SB1070 GPEC-SB1071 GPEC-SB1072 GPEC-SB1073 GPEC-SB1074 GPEC-SB1075 GPEC-SB1076 GPEC-SB1077 GPEC-SB1078 GPEC-SB1079 GPEC-SB1080 GPEC-SB1081 GPEC-SB1082 GPEC-SB1083 GPEC-SB1084 GPEC-SB1085 GPEC-SB1086 GPEC-SB1087 GPEC-SB1088 GPEC-SB1089 GPEC-SB1090 GPEC-SB1091 GPEC-SB1092 GPEC-SB1093 GPEC-SB1094 GPEC-SB1095 GPEC-SB1096 GPEC-SB1097 GPEC-SB1098 GPEC-SB1099 GPEC-SB1100 GPEC-SB1101 GPEC-SB1102 GPEC-SB1103 GPEC-SB1104 GPEC-SB1105 GPEC-SB1106 GPEC-SB1107 GPEC-SB1108 GPEC-SB1109 GPEC-SB1110 GPEC-SB1111 GPEC-SB1112 GPEC-SB1113 GPEC-SB1114 GPEC-SB1115 GPEC-SB1116 GPEC-SB1117 GPEC-SB1118 GPEC-SB1119 GPEC-SB1120 GPEC-SB1121 GPEC-SB1122 GPEC-SB1123 GPEC-SB1124 GPEC-SB1125 GPEC-SB1126 GPEC-SB1127 GPEC-SB1128 GPEC-SB1129 GPEC-SB1130 GPEC-SB1131 GPEC-SB1132 GPEC-SB1133 GPEC-SB1134 GPEC-SB1135 GPEC-SB1136 GPEC-SB1137 GPEC-SB1138 GPEC-SB1139 GPEC-SB1140 GPEC-SB1141 GPEC-SB1142 GPEC-SB1143 GPEC-SB1144 GPEC-SB1145 GPEC-SB1146 GPEC-SB1147 GPEC-SB1148 GPEC-SB1149 GPEC-SB1150 GPEC-SB1151 GPEC-SB1152 GPEC-SB1153 GPEC-SB1154 GPEC-SB1155 GPEC-SB1156 GPEC-SB1157 GPEC-SB1158 GPEC-SB1159 GPEC-SB1160 GPEC-SB1161 GPEC-SB1162 GPEC-SB1163 GPEC-SB1164 GPEC-SB1165 GPEC-SB1166 GPEC-SB1167 GPEC-SB1168 GPEC-SB1169 GPEC-SB1170 GPEC-SB1171 GPEC-SB1172 GPEC-SB1173 GPEC-SB1174 GPEC-SB1175 GPEC-SB1176 GPEC-SB1177 GPEC-SB1178 GPEC-SB1179 GPEC-SB1180 GPEC-SB1181 GPEC-SB1182 GPEC-SB1183 GPEC-SB1184 GPEC-SB1185 GPEC-SB1186 GPEC-SB1187 GPEC-SB1188 GPEC-SB1189 GPEC-SB1190 GPEC-SB1191 GPEC-SB1192 GPEC-SB1193 GPEC-SB1194 GPEC-SB1195 GPEC-SB1196 GPEC-SB1197 GPEC-SB1198 GPEC-SB1199 GPEC-SB1200 GPEC-SB1201 GPEC-SB1202 GPEC-SB1203 GPEC-SB1204 GPEC-SB1205 GPEC-SB1206 GPEC-SB1207 GPEC-SB1208 GPEC-SB1209 GPEC-SB1210 GPEC-SB1211 GPEC-SB1212 GPEC-SB1213 GPEC-SB1214 GPEC-SB1215 GPEC-SB1216 GPEC-SB1217 GPEC-SB1218 GPEC-SB1219 GPEC-SB1220 GPEC-SB1221 GPEC-SB1222 GPEC-SB1223 GPEC-SB1224 GPEC-SB1225 GPEC-SB1226 GPEC-SB1227 GPEC-SB1228 GPEC-SB1229 GPEC-SB1230 GPEC-SB1231 GPEC-SB1232 GPEC-SB1233 GPEC-SB1234 GPEC-SB1235 GPEC-SB1236 GPEC-SB1237 GPEC-SB1238 GPEC-SB1239 GPEC-SB1240 GPEC-SB1241 GPEC-SB1242 GPEC-SB1243 GPEC-SB1244 GPEC-SB1245 GPEC-SB1246 GPEC-SB1247 GPEC-SB1248 GPEC-SB1249 GPEC-SB1250 GPEC-SB1251 GPEC-SB1252 GPEC-SB1253 GPEC-SB1254 GPEC-SB1255 GPEC-SB1256 GPEC-SB1257 GPEC-SB1258 GPEC-SB1259 GPEC-SB1260 GPEC-SB1261 GPEC-SB1262 GPEC-SB1263 GPEC-SB1264 GPEC-SB1265 GPEC-SB1266 GPEC-SB1267 GPEC-SB1268 GPEC-SB1269 GPEC-SB1270 GPEC-SB1271 GPEC-SB1272 GPEC-SB1273 GPEC-SB1274 GPEC-SB1275 GPEC-SB1276 GPEC-SB1277 GPEC-SB1278 GPEC-SB1279 GPEC-SB1280 GPEC-SB

| Sample Name | GPEC-TP548 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 11/8/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 131 |
| Benzo[a]pyrene | 87.6 |
| Benzo[b]fluoranthene | 48.3 |
| Benzo[k]fluoranthene | 41.2 |
| Chrysene | 148 |
| Dibenz[a,h]anthracene | 13.7 |
| Indeno[1,2,3-cd]pyrene | 25.7 |

| Sample Name | GPEC-SB530 |
|---|---|
| Start Depth (ft.) | 0.5 |
| End Depth (ft.) | 1.5 |
| Sample Date | 3/15/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.62 |
| Benzo[a]pyrene | 6.53 |
| Benzo[b]fluoranthene | 3.82 |
| Benzo[k]fluoranthene | 3.56 |
| Chrysene | 4.76 |
| Dibenz[a,h]anthracene | 1.38 |

| Sample Name | GPEC-TP547 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 11/7/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 80.8 |
| Benzo[a]pyrene | 61.2 |
| Benzo[b]fluoranthene | 44 |
| Benzo[k]fluoranthene | 25.7 |
| Chrysene | 96 |
| Dibenz[a,h]anthracene | 13.6 |
| Indeno[1,2,3-cd]pyrene | 23.8 |

| Sample Name | GPEC-TP542 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 10/30/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.141 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 41 |
| Benzo[a]pyrene | 29.5 |
| Benzo[b]fluoranthene | 13.7 |
| Benzo[k]fluoranthene | 19.1 |
| Chrysene | 51.9 |
| Dibenz[a,h]anthracene | 8.09 |
| Indeno[1,2,3-cd]pyrene | 15.1 |

| Sample Name | GPEC-TP538 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 11/15/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 29.3 D |
| Toluene | 119 D |
| Ethylbenzene | 473 D |
| Total Xylene | 537 D |
| **PAHs (mg/kg)** | |
| Acenaphthene | 585 |
| Acenaphthylene | 222 |
| 2-Methylnaphthalene | 2180 |
| Naphthalene | 4810 |
| Phenanthrene | 1940 |
| Pyrene | 1160 |
| Benz[a]anthracene | 470 |
| Benzo[a]pyrene | 389 |
| Benzo[b]fluoranthene | 151 |
| Benzo[k]fluoranthene | 214 |
| Chrysene | 502 |
| Dibenz[a,h]anthracene | 54.9 |
| Indeno[1,2,3-cd]pyrene | 148 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 33 D |

| Sample Name | GPEC-SB531 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 3/7/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benzo[a]pyrene | 1.39 |
| **Metals (mg/kg)** | |
| Selenium | 6.28 |

| Sample Name | GPEC-SB527 | GPEC-SB527 |
|---|---|---|
| Start Depth (ft.) | 5 | 21 |
| End Depth (ft.) | 6 | 22 |
| Sample Date | 3/14/2019 | 4/2/2019 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 1.1 | 1.82 U |
| Ethylbenzene | 3.21 | 60.7 D |
| Total Xylene | 0.209 | 22.8 D |
| **PAHs (mg/kg)** | | |
| 2-Methylnaphthalene | 0.225 | 76.9 |
| Naphthalene | 0.304 | 199 |
| Benz[a]anthracene | 0.732 | 4.11 |
| Benzo[a]pyrene | 0.756 | 4.14 |
| Benzo[b]fluoranthene | 0.464 | 1.9 |
| Benzo[k]fluoranthene | 0.548 | 2.7 |
| Chrysene | 0.861 | 4.88 |

| Sample Name | GPEC-TP526 (7-8) |
|---|---|
| Start Depth (ft.) | 7 |
| End Depth (ft.) | 8 |
| Sample Date | 11/29/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 2.32 D |
| Toluene | 6.25 D |
| Ethylbenzene | 48.3 D |
| Total Xylene | 46.6 D |
| **PAHs (mg/kg)** | |
| Acenaphthylene | 140 |
| 2-Methylnaphthalene | 124 |
| Naphthalene | 490 |
| Benz[a]anthracene | 120 |
| Benzo[a]pyrene | 99.1 |
| Benzo[b]fluoranthene | 46.8 |
| Benzo[k]fluoranthene | 44.8 |
| Chrysene | 112 |
| Dibenz[a,h]anthracene | 22 |
| Indeno[1,2,3-cd]pyrene | 43.3 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 13.2 D |
| **Metals (mg/kg)** | |
| Arsenic | 21 |
| Lead | 589 |
| Mercury | 0.906 |

| Sample Name | GPEC-TP554 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 11/17/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Total Xylene | 4.11 D |
| **PAHs (mg/kg)** | |
| Acenaphthene | 23.4 |
| Acenaphthylene | 84.3 |
| 2-Methylnaphthalene | 230 |
| Naphthalene | 132 |
| Phenanthrene | 321 |
| Pyrene | 167 |
| Benz[a]anthracene | 78.6 |
| Benzo[a]pyrene | 46.8 |
| Benzo[b]fluoranthene | 21.3 |
| Benzo[k]fluoranthene | 32.2 |
| Chrysene | 89.1 |
| Dibenz[a,h]anthracene | 10.5 |
| Indeno[1,2,3-cd]pyrene | 21 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 16 D |

| Sample Name | GPEC-TP541 (4-5) |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 12/20/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 6.52 |
| Benzo[a]pyrene | 5.73 |
| Benzo[b]fluoranthene | 4.36 |
| Benzo[k]fluoranthene | 4.29 |
| Chrysene | 6.8 |
| Dibenz[a,h]anthracene | 1.17 |

| Sample Name | GPEC-TP553 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 11/21/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.095 |
| **PAHs (mg/kg)** | |
| Naphthalene | 12.8 |
| Benz[a]anthracene | 38.8 |
| Benzo[a]pyrene | 38 |
| Benzo[b]fluoranthene | 20.9 |
| Benzo[k]fluoranthene | 22.3 |
| Chrysene | 45.6 |
| Dibenz[a,h]anthracene | 9.41 |
| Indeno[1,2,3-cd]pyrene | 19 |

| Sample Name | GPEC-SB704 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 10/11/2016 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.67 |
| Benzo[a]pyrene | 2.87 |
| Benzo[b]fluoranthene | 2.19 |
| Benzo[k]fluoranthene | 2.39 |
| Chrysene | 2.55 |
| **Metals (mg/kg)** | |
| Mercury | 1.44 |

| Sample Name | GPEC-TP550 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 12/7/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 8.96 D |
| Toluene | 83.1 D |
| Ethylbenzene | 116 D |
| Total Xylene | 250 D |
| **Other VOCs (mg/kg)** | |
| **PAHs (mg/kg)** | |
| Acenaphthene | 286 |
| Acenaphthylene | 144 |
| 2-Methylnaphthalene | 1390 |
| Naphthalene | 2260 |
| Phenanthrene | 1950 |
| Pyrene | 1480 |
| Benz[a]anthracene | 418 |
| Benzo[a]pyrene | 321 |
| Benzo[b]fluoranthene | 166 |
| Benzo[k]fluoranthene | 181 |
| Chrysene | 370 |
| Dibenz[a,h]anthracene | 43.5 |
| Indeno[1,2,3-cd]pyrene | 125 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 116 D |

| Sample Name | GPEC-SB217 (6-7) | GPEC-SB217 (10-11) |
|---|---|---|
| Start Depth (ft.) | 6 | 10 |
| End Depth (ft.) | 7 | 11 |
| Sample Date | 6/29/2012 | 7/1/2012 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | 0.00567 U | 1.81 |
| Toluene | 0.00567 U | 1.44 |
| Ethylbenzene | 0.00567 U | 155 J |
| Total Xylene | 0.011 U | 130 |
| **PAHs (mg/kg)** | | |
| Acenaphthene | 0.545 | 140 |
| 2-Methylnaphthalene | 0.188 U | 46.3 |
| Naphthalene | 0.222 | 143 |
| Benz[a]anthracene | 6.29 | 69.2 |
| Benzo[a]pyrene | 7.37 | 67.4 |
| Benzo[b]fluoranthene | 6.22 | 29.1 |
| Benzo[k]fluoranthene | 5.37 | 33.3 |
| Chrysene | 6.44 | 86.8 |
| Dibenz[a,h]anthracene | 0.713 | 10.6 |
| Indeno[1,2,3-cd]pyrene | 2.12 | 18.2 |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | 0.252 | 12 J |

| Sample Name | GPEC-SB529 | GPEC-SB-XX-030819 | GPEC-SB-XX-040319 | GPEC-SB529 (11-12) |
|---|---|---|---|---|
| Start Depth (ft.) | 0.5 | 0.5 | 11 | 11 |
| End Depth (ft.) | 1.5 | 1.5 | 12 | 12 |
| Sample Date | 3/8/2019 | 3/8/2019 | 4/3/2019 | 4/3/2019 |
| **Analyte** | | | | |
| **BTEX (mg/kg)** | | | | |
| Benzene | 0.415 D | 0.262 D | 0.048 | 0.036 |
| Toluene | 1.12 D | 0.683 D | 0.097 | 0.079 |
| Ethylbenzene | 1.49 D | 0.675 D | 0.147 | 0.118 |
| Total Xylene | 3.13 D | 1.45 D | 0.314 | 0.232 |
| **PAHs (mg/kg)** | | | | |
| 2-Methylnaphthalene | 68.4 | 44.6 | 2.48 | 1.44 |
| Naphthalene | 68.5 | 33.8 | 2.14 | 1.35 |
| Benz[a]anthracene | 74.2 | 61.3 | 5.78 | 2.91 |
| Benzo[a]pyrene | 111 | 89.6 | 6.26 | 3.54 |
| Benzo[b]fluoranthene | 53.9 | 38.2 | 3.31 | 1.78 |
| Benzo[k]fluoranthene | 41.8 | 52.1 | 3.35 | 2.15 |
| Chrysene | 78.1 | 68.3 | 6.87 | 3.42 |
| Dibenz[a,h]anthracene | 25.9 | 24.9 | 1.33 | 0.733 |
| Indeno[1,2,3-cd]pyrene | 56.1 | 45.5 | 2.73 | 1.82 |
| **Metals (mg/kg)** | | | | |
| Selenium | 3.56 J | 4.01 J | 3.88 U | 3.95 U |

| Sample Name | GPEC-TP534 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 1/9/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 7.08 |
| Benzo[a]pyrene | 5.2 |
| Benzo[b]fluoranthene | 3.67 |
| Benzo[k]fluoranthene | 4.5 |
| Chrysene | 7.22 |
| Dibenz[a,h]anthracene | 1.33 |
| **Metals (mg/kg)** | |
| Lead | 973 |
| Mercury | 2.52 |

| Sample Name | GPEC-SB528 |
|---|---|
| Start Depth (ft.) | 0.5 |
| End Depth (ft.) | 1.5 |
| Sample Date | 3/15/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 6.33 |
| Benzo[a]pyrene | 9.08 |
| Benzo[b]fluoranthene | 5.03 |
| Benzo[k]fluoranthene | 5.97 |
| Chrysene | 7.6 |
| Dibenz[a,h]anthracene | 2.62 |
| **Metals (mg/kg)** | |
| Mercury | 1.12 |
| Selenium | 4.32 |

| Sample Name | GPEC-TP533 (2-3) | GPEC-TP533 (8-9) |
|---|---|---|
| Start Depth (ft.) | 2 | 8 |
| End Depth (ft.) | 3 | 9 |
| Sample Date | 9/18/2017 | 9/18/2017 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | 0.687 D | 5.71 D |
| Total Xylene | 1.02 D | 2.69 D |
| **PAHs (mg/kg)** | | |
| Naphthalene | 2.99 | 63.6 |
| Benz[a]anthracene | 41.2 | 43 |
| Benzo[a]pyrene | 26.2 | 31.6 |
| Benzo[b]fluoranthene | 10.7 | 14.8 |
| Benzo[k]fluoranthene | 17.4 | 19.1 |
| Chrysene | 42.4 | 44.3 |
| Dibenz[a,h]anthracene | 4.94 | 5.79 |
| Indeno[1,2,3-cd]pyrene | 11 | 13.7 |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | 6.6 D | 5.32 D |
| **Metals (mg/kg)** | | |
| Mercury | 0.425 | 1.34 |

| Sample Name | GPEC-TP539 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 12/13/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.688 D |
| Ethylbenzene | 2.57 D |
| Total Xylene | 2.29 D |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 39.2 |
| Benzo[a]pyrene | 24.2 |
| Benzo[b]fluoranthene | 11.2 |
| Benzo[k]fluoranthene | 14.5 |
| Chrysene | 41.9 |
| Dibenz[a,h]anthracene | 3.53 |
| Indeno[1,2,3-cd]pyrene | 9.31 |

| Sample Name | GPEC-SB526 |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 3/11/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 7.82 |
| Benzo[a]pyrene | 19.1 |
| Benzo[b]fluoranthene | 13 |
| Benzo[k]fluoranthene | 12.9 |
| Chrysene | 12 |
| Dibenz[a,h]anthracene | 6.32 |
| Indeno[1,2,3-cd]pyrene | 14.7 |
| **Metals (mg/kg)** | |
| Arsenic | 16.1 |

| Sample Name | GPEC-TP525 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 9/1/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.705 D |
| Toluene | 1.47 D |
| Total Xylene | 3.31 D |
| **PAHs (mg/kg)** | |
| Naphthalene | 40 |
| Benz[a]anthracene | 66.5 |
| Benzo[a]pyrene | 49.1 |
| Benzo[b]fluoranthene | 40.4 |
| Benzo[k]fluoranthene | 29.1 |
| Chrysene | 68.7 |
| Dibenz[a,h]anthracene | 13.3 |
| Indeno[1,2,3-cd]pyrene | 25.3 |
| **Other SVOCs (mg/kg)** | |
| 2-Methylphenol (o-Cresol) | 0.538 D |
| **Metals (mg/kg)** | |
| Arsenic | 23 |

| Sample Name | GPEC-TP532 |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 1/3/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 16.2 |
| Benzo[a]pyrene | 13.7 |
| Benzo[b]fluoranthene | 11.1 |
| Benzo[k]fluoranthene | 9.22 |
| Chrysene | 16.7 |
| Dibenz[a,h]anthracene | 3.14 |
| **Metals (mg/kg)** | |
| Arsenic | 19 |
| Barium | 899 |
| Lead | 1310 |
| Mercury | 16.2 |

| Sample Name | GPEC-SB-8 (10-12) | GPEC-SB-XX |
|---|---|---|
| Start Depth (ft.) | 10 | 10 |
| End Depth (ft.) | 12 | 12 |
| Sample Date | 5/12/2009 | 5/15/2009 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 0.47 | 3.2 |
| Benzo[a]pyrene | 0.87 | 2.6 |
| Benzo[b]fluoranthene | 0.49 | 1.9 |
| Chrysene | 0.62 | 6 |
| Dibenz[a,h]anthracene | 1.4 | 3.8 |
| **Metals (mg/kg)** | | |
| Arsenic | 14 J | 32.4 J |

| Sample Name | GPEC-TP522 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 12/8/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 8.65 D |
| Toluene | 7.15 D |
| Ethylbenzene | 30.1 D |
| Total Xylene | 40.4 D |
| **PAHs (mg/kg)** | |
| Acenaphthylene | 117 |
| 2-Methylnaphthalene | 252 |
| Naphthalene | 295 |
| Benz[a]anthracene | 135 |
| Benzo[a]pyrene | 78 |
| Benzo[b]fluoranthene | 39.5 |
| Benzo[k]fluoranthene | 41.5 |
| Chrysene | 132 |
| Dibenz[a,h]anthracene | 10 |
| Indeno[1,2,3-cd]pyrene | 28.6 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 18.3 D |

| Sample Name | GPEC-SB522 | GPEC-SB522 (30-31) | GPEC-SB-XX-041819 | GPEC-SB522 (85-86) |
|---|---|---|---|---|
| Start Depth (ft.) | 3 | 30 | 30 | 85 |
| End Depth (ft.) | 4 | 31 | 31 | 86 |
| Sample Date | 3/22/2019 | 4/18/2019 | 4/18/2019 | 4/18/2019 |
| **Analyte** | | | | |
| **BTEX (mg/kg)** | | | | |
| Benzene | 6.34 | 0.136 J | 0.47 J | 0.000252 J |
| Toluene | 10.5 | 0.082 | 0.115 | 0.00076 U |
| Ethylbenzene | 1.96 | 0.09 UJ | 0.172 J | 0.00152 U |
| **PAHs (mg/kg)** | | | | |
| Acetone | 0.212 U | 0.179 U | 0.263 U | 0.025 |
| 1,2-Dichloroethane | 0.053 U | 0.045 U | 0.066 U | 0.00076 U |
| **PAHs (mg/kg)** | | | | |
| Benz[a]anthracene | 9.1 | 23.1 | 20.9 | |
| Benzo[a]pyrene | 10.1 | 20 | 18.5 | |
| Benzo[b]fluoranthene | 6 | 7.16 | 9.41 | |
| Benzo[k]fluoranthene | 5.39 | 12 | 9.28 | |
| Chrysene | 10.2 | 22.2 | 19.5 | |
| Dibenz[a,h]anthracene | 2.63 | 2.94 | 1.45 | |
| **Metals (mg/kg)** | | | | |
| Arsenic | 4.9 | 1.03 | 1.9 | 17.8 |
| Manganese | 290 | 91.8 | 128 | 2140 |
| Mercury | 0.431 | 0.858 | 0.939 | 0.026 U |

| Sample Name | GPEC-SB523 |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 3/14/2019 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.579 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 18.5 |
| Benzo[a]pyrene | 18.5 |
| Benzo[b]fluoranthene | 8.96 |
| Benzo[k]fluoranthene | 12.1 |
| Chrysene | 19.2 |
| Dibenz[a,h]anthracene | 4.07 |
| Indeno[1,2,3-cd]pyrene | 9.41 |
| **Metals (mg/kg)** | |
| Selenium | 4.21 |

| Sample Name | GPEC-TP521 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 12/22/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 1.34 |
| **Other VOCs (mg/kg)** | |
| Acetone | 0.958 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 40.1 |
| Benzo[a]pyrene | 43.5 |
| Benzo[b]fluoranthene | 67.6 |
| Benzo[k]fluoranthene | 29.8 |
| Chrysene | 45.4 |
| Dibenz[a,h]anthracene | 18.1 |
| Indeno[1,2,3-cd]pyrene | 37.3 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 20.6 D |
| **Metals (mg/kg)** | |
| Mercury | 7.18 |

| Sample Name | GPEC-TP520 (3-4) |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 12/19/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.371 D |
| Toluene | 1.85 D |
| Ethylbenzene | 3.78 D |
| Total Xylene | 5.19 D |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | 448 |
| Naphthalene | 630 |
| Benz[a]anthracene | 93.5 |
| Benzo[a]pyrene | 63.6 |
| Benzo[b]fluoranthene | 20.8 |
| Benzo[k]fluoranthene | 37.1 |
| Chrysene | 96.7 |
| Dibenz[a,h]anthracene | 5.46 |
| Indeno[1,2,3-cd]pyrene | 19.7 |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | 20.6 D |
| **Metals (mg/kg)** | |
| Mercury | 1.49 |

| Sample Name | GPEC-SB524 |
|---|---|
| Start Depth (ft.) | 4 |
| End Depth (ft.) | 5 |
| Sample Date | 3/11/2019 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 24 |
| Benzo[a]pyrene | 29.4 |
| Benzo[b]fluoranthene | 23.5 |
| Benzo[k]fluoranthene | 21 |
| Chrysene | 25.8 |
| Dibenz[a,h]anthracene | 8.53 |
| Indeno[1,2,3-cd]pyrene | 21.4 |
| **Metals (mg/kg)** | |
| Mercury | 1.24 |

| Sample Name | GPEC-TP517 (2-3) |
|---|---|
| Start Depth (ft.) | 2 |
| End Depth (ft.) | 3 |
| Sample Date | 8/30/2017 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | 0.211 |
| Toluene | 0.258 |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 19.3 |
| Benzo[a]pyrene | 18.4 |
| Benzo[b]fluoranthene | 12.6 |
| Benzo[k]fluoranthene | 14 |
| Chrysene | 18.9 |
| Dibenz[a,h]anthracene | 3.78 |
| Indeno[1,2,3-cd]pyrene | 10.7 |
| **Metals (mg/kg)** | |
| Mercury | 1.94 |

| Sample Name | GPEC-TP519 (1-2) |
|---|---|
| Start Depth (ft.) | 1 |
| End Depth (ft.) | 2 |
| Sample Date | 9/6/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 6.94 |
| Benzo[a]pyrene | 6.8 |
| Benzo[b]fluoranthene | 4.34 |
| Benzo[k]fluoranthene | 3.95 |
| Chrysene | 8.01 |
| Dibenz[a,h]anthracene | 2.45 |
| **Metals (mg/kg)** | |
| Arsenic | 19.4 |
| Lead | 3560 |
| Mercury | 4.82 |

| Sample Name | GPEC-TP518 |
|---|---|
| Start Depth (ft.) | 3 |
| End Depth (ft.) | 4 |
| Sample Date | 1/11/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 6.05 |
| Benzo[a]pyrene | 3.97 |
| Benzo[b]fluoranthene | 2.21 |
| Benzo[k]fluoranthene | 3.18 |
| Chrysene | 6.43 |
| **Metals (mg/kg)** | |
| Arsenic | 17.2 |
| Mercury | 1.47 |

***LEGEND***

- BORING LOCATION
- TEST PIT

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- SOLID NAPL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATION/ SULFER-LIKE ODOR
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND

0 40 80 160
SCALE: 1" = 80'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

SHALLOW SUBSURFACE SOIL
ANALYTICAL SUMMARY
(0-25 FT BGS)
AREA 8 - EAST

June 2026 Plate 9

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Soil Analytical Shallow Area 8 East_241119_250409.mxd

| Sample Name | GPEC-SB522 (30-31) | GPEC-SB-XX-041819 |
|---|---|---|
| Start Depth (ft) | 30 | 30 |
| End Depth (ft) | 31 | 31 |
| Sample Date | 4/18/2019 | 4/18/2019 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **0.136 J** | **0.47 J** |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **23.1** | **20.9** |
| Benzo[a]pyrene | **20** | **18.5** |
| Benzo[b]fluoranthene | **7.16** | **9.41** |
| Benzo[k]fluoranthene | **12** | **9.28** |
| Chrysene | **22.2** | **19.5** |
| Dibenz[a,h]anthracene | **2.94** | **1.45** |
| **Metals (mg/kg)** | | |
| Mercury | **0.858** | **0.939** |

| Sample Name | GPEC-SB-4B (34-36) |
|---|---|
| Start Depth (ft) | 34 |
| End Depth (ft) | 36 |
| Sample Date | 4/28/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **6.5** |
| Benzo[a]pyrene | **5.7** |
| Benzo[b]fluoranthene | **3.1 J** |
| Chrysene | **6.7** |
| Dibenz[a,h]anthracene | **4.1** |
| **Other SVOCs (mg/kg)** | |
| Nitrobenzene | **0.39 J** |
| **Metals (mg/kg)** | |
| Arsenic | **51.5 J** |

| Sample Name | GPEC-SB803 |
|---|---|
| Start Depth (ft.) | 31 |
| End Depth (ft.) | 32 |
| Sample Date | 4/18/2017 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| Arsenic | **131** |
| Selenium | **7.26** |

| Sample Name | GPEC-SB211 (37-38) |
|---|---|
| Start Depth (ft) | 37 |
| End Depth (ft) | 38 |
| Sample Date | 7/18/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.109 J** |
| Ethylbenzene | **3.5 J** |
| Total Xylene | **4.34 J** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.78 J** |
| Benzo[a]pyrene | **1.44 J** |
| Chrysene | **1.96 J** |
| Dibenz[a,h]anthracene | **0.228 J** |
| **Metals (mg/kg)** | |
| Arsenic | **16.2 J** |
| Mercury | **1.44 J** |

| Sample Name | GPEC-SB212 (28-29) | GPEC-XX071012 |
|---|---|---|
| Start Depth (ft) | 28 | 28 |
| End Depth (ft) | 29 | 29 |
| Sample Date | 7/10/2012 | 7/10/2012 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | **2.83 J** | **9.22 J** |
| Benzo[a]pyrene | **1.27 J** | **4.21 J** |
| Benzo[b]fluoranthene | **0.655 J** | **2.26 J** |
| Benzo[k]fluoranthene | **0.531 J** | **1.26 J** |
| Chrysene | **3.25 J** | **9.41 J** |
| **Metals (mg/kg)** | | |
| Arsenic | **89.2 J** | **208 J** |
| Lead | **263 J** | **524 J** |
| Mercury | **2.06 J** | **3.62 J** |
| Nickel | **132 J** | **246 J** |
| Selenium | **25.6 J** | **48.8 J** |

| Sample Name | GPEC-SB215 (36-37) |
|---|---|
| Start Depth (ft) | 36 |
| End Depth (ft) | 37 |
| Sample Date | 7/16/2012 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **1.35** |
| Benzo[a]pyrene | **1.13** |
| Chrysene | **1.49** |

| Sample Name | GPEC-SB-4B (34-36) |
|---|---|
| Start Depth (ft) | 34 |
| End Depth (ft) | 36 |
| Sample Date | 4/28/2009 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **6.5** |
| Benzo[a]pyrene | **5.7** |
| Benzo[b]fluoranthene | **3.1 J** |
| Chrysene | **6.7** |
| Dibenz[a,h]anthracene | **4.1** |
| **Other SVOCs (mg/kg)** | |
| Nitrobenzene | **0.39 J** |
| **Metals (mg/kg)** | |
| Arsenic | **51.5 J** |

| Sample Name | GPEC-SB210 (29-30) | GPEC-SB210 (37-38) |
|---|---|---|
| Start Depth (ft) | 29 | 37 |
| End Depth (ft) | 30 | 38 |
| Sample Date | 7/9/2012 | 7/9/2012 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Chrysene | **0.056** | **1.04** |
| **Metals (mg/kg)** | | |
| Arsenic | **95.8** | **15.6** |

| Sample Name | GPEC-SB209 (28-29) |
|---|---|
| Start Depth (ft) | 28 |
| End Depth (ft) | 29 |
| Sample Date | 7/9/2012 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **2.65** |
| Benzo[a]pyrene | **1.11** |
| Chrysene | **2.96** |
| **Metals (mg/kg)** | |
| Arsenic | **83.8** |
| Mercury | **1.56** |
| Selenium | **7.38** |

| Sample Name | GPEC-SB208 (29-30) |
|---|---|
| Start Depth (ft) | 29 |
| End Depth (ft) | 30 |
| Sample Date | 7/10/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.227** |
| Ethylbenzene | **20.5** |
| Total Xylene | **9.99** |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | **60.1** |
| Naphthalene | **80.8** |
| Benz[a]anthracene | **7.2** |
| Benzo[a]pyrene | **4.13** |
| Benzo[b]fluoranthene | **1.85** |
| Benzo[k]fluoranthene | **1.84** |
| Chrysene | **7.94** |
| **Metals (mg/kg)** | |
| Arsenic | **55.1** |
| Selenium | **8.86** |

| Sample Name | GPEC-SB-3 (34-36) |
|---|---|
| Start Depth (ft) | 34 |
| End Depth (ft) | 36 |
| Sample Date | 4/17/2009 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **0.64 J** |
| Ethylbenzene | **11** |
| Total Xylene | **16** |
| **Other VOCs (mg/kg)** | |
| Methylene chloride | **0.24 J** |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | **110** |
| Naphthalene | **150** |
| Benz[a]anthracene | **14 J** |
| Benzo[a]pyrene | **11 J** |
| Benzo[b]fluoranthene | **7.3 J** |
| Benzo[k]fluoranthene | **2 J** |
| Chrysene | **16 J** |
| **Metals (mg/kg)** | |
| Arsenic | **124 J** |

| Sample Name | GPEC-SB207 (36-37) |
|---|---|
| Start Depth (ft) | 36 |
| End Depth (ft) | 37 |
| Sample Date | 6/26/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **9.21** |
| Total Xylene | **4.74** |
| **PAHs (mg/kg)** | |
| Naphthalene | **27** |
| Benz[a]anthracene | **13.5** |
| Benzo[a]pyrene | **11** |
| Benzo[b]fluoranthene | **4.59** |
| Benzo[k]fluoranthene | **4.95** |
| Chrysene | **13.6** |
| Dibenz[a,h]anthracene | **1.19** |
| **Metals (mg/kg)** | |
| Arsenic | **46.6** |
| Selenium | **11.4** |

| Sample Name | GPEC-SB206 (30-32) |
|---|---|
| Start Depth (ft) | 30 |
| End Depth (ft) | 32 |
| Sample Date | 6/27/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **5.58** |
| Total Xylene | **6.45** |
| **PAHs (mg/kg)** | |
| Acenaphthene | **265** |
| 2-Methylnaphthalene | **573** |
| Naphthalene | **652** |
| Benz[a]anthracene | **40.3** |
| Benzo[a]pyrene | **31.8** |
| Benzo[b]fluoranthene | **11** |
| Benzo[k]fluoranthene | **18.5** |
| Chrysene | **42.8** |
| Dibenz[a,h]anthracene | **4.01 J** |
| Indeno[1,2,3-cd]pyrene | **8.47** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **13.2** |
| **Metals (mg/kg)** | |
| Arsenic | **229** |
| Selenium | **40.5** |

| Sample Name | GPEC-SB513 (33-34) |
|---|---|
| Start Depth | 33 |
| End Depth | 34 |
| Sample Date | 1/18/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.165 J** |
| 1,2-Dichloroethane | **0.131 J** |

| Sample Name | GPEC-SB512 (29-30) |
|---|---|
| Start Depth | 29 |
| End Depth | 30 |
| Sample Date | 1/16/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.138 J** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **3.07** |
| Benzo[a]pyrene | **1.67** |
| Benzo[b]fluoranthene | **1.19** |
| Chrysene | **3.04** |
| **Metals (mg/kg)** | |
| Arsenic | **11.9** |

| Sample Name | GPEC-SB341 (28-28.5) |
|---|---|
| Start Depth | 28 |
| End Depth | 28.5 |
| Sample Date | 3/30/2015 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.145 J** |
| **Other SVOCs (mg/kg)** | |
| **Metals (mg/kg)** | |
| Arsenic | **32.4** |
| Lead | **461** |
| Mercury | **3.62 J** |
| Selenium | **4.74** |

| Sample Name | GPEC-SB/P304 (29-30) |
|---|---|
| Start Depth | 29 |
| End Depth | 30 |
| Sample Date | 3/31/2015 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **1.37 J** |
| Toluene | **0.952 J** |
| Total Xylene | **40.8 J** |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | **14.8** |
| Naphthalene | **16.2** |
| Benz[a]anthracene | **2.77** |
| Benzo[a]pyrene | **2.67** |
| Benzo[b]fluoranthene | **1.26** |
| Benzo[k]fluoranthene | **1.97** |
| Chrysene | **3.28** |
| Dibenz[a,h]anthracene | **0.435** |
| **Metals (mg/kg)** | |
| Lead | **730** |
| Mercury | **0.161** |
| Nickel | **166** |
| Selenium | **4.16** |

| Sample Name | GPEC-SB326 (26-27) |
|---|---|
| Start Depth | 26 |
| End Depth | 27 |
| Sample Date | 5/7/2015 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Benzene | **1.55** |
| **PAHs (mg/kg)** | |
| Benzo[a]pyrene | **1.95 D** |
| Chrysene | **2.21 D** |

| Sample Name | GPEC-SB-1B (52-54) |
|---|---|
| Start Depth | 52 |
| End Depth | 54 |
| Sample Date | 4/9/2009 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Toluene | **1.8** |
| Ethylbenzene | **7.1** |
| Total Xylene | **15** |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | **35 J** |
| Benzo[a]pyrene | **36 J** |
| Benzo[b]fluoranthene | **21 J** |
| Benzo[k]fluoranthene | **7.3 J** |
| Chrysene | **28 J** |
| Indeno[1,2,3-cd]pyrene | **6.5 J** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **14 J** |

| Sample Name | GPEC-SB-103 (56-57) | GPEC-SBXX051910 |
|---|---|---|
| Start Depth | 56 | 56 |
| End Depth | 57 | 57 |
| Sample Date | 5/19/2010 | 5/19/2010 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | **0.85** | **1.4 J** |
| **PAHs (mg/kg)** | | |
| Naphthalene | **71.2 J** | **4.89 J** |
| Benz[a]anthracene | **4.05 J** | **0.402** |
| Benzo[a]pyrene | **3.39 J** | **0.342** |
| Benzo[b]fluoranthene | **1.96 J** | **0.141 J** |
| Chrysene | **3.43** | **0.338** |

| Sample Name | GPEC-SB203 (29-30) |
|---|---|
| Start Depth | 29 |
| End Depth | 30 |
| Sample Date | 7/11/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **22.2** |
| Total Xylene | **8.16** |
| **PAHs (mg/kg)** | |
| 2-Methylnaphthalene | **41.7** |
| Naphthalene | **109** |
| Benz[a]anthracene | **4.64** |
| Benzo[a]pyrene | **2.55** |
| Benzo[k]fluoranthene | **1.24** |
| Chrysene | **4.94** |
| **Metals (mg/kg)** | |
| Arsenic | **108** |
| Lead | **456** |
| Mercury | **2.41** |
| Nickel | **357** |
| Selenium | **28.4** |

| Sample Name | GPEC-SB205 (34-35) |
|---|---|
| Start Depth (ft) | 34 |
| End Depth (ft) | 35 |
| Sample Date | 7/2/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **27.8** |
| Total Xylene | **6.03** |
| **Other VOCs (mg/kg)** | |
| Carbon disulfide | **2.55** |
| **PAHs (mg/kg)** | |
| Naphthalene | **22.6** |
| Benz[a]anthracene | **4.38** |
| Benzo[a]pyrene | **3.81** |
| Benzo[b]fluoranthene | **1.97** |
| Benzo[k]fluoranthene | **2.11** |
| Chrysene | **4.85** |
| **Metals (mg/kg)** | |
| Arsenic | **93.9** |
| Mercury | **2.12 J** |
| Nickel | **232** |
| Selenium | **24.4** |

| Sample Name | GPEC-SB-104 (32.5-33) |
|---|---|
| Start Depth (ft) | 32.5 |
| End Depth (ft) | 33 |
| Sample Date | 5/25/2010 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **55** |
| **Other VOCs (mg/kg)** | |
| Methylene chloride | **60 J** |
| **PAHs (mg/kg)** | |
| Naphthalene | **53.3** |
| Benz[a]anthracene | **6.3** |
| Benzo[a]pyrene | **4.12** |
| Benzo[b]fluoranthene | **2.28** |
| Benzo[k]fluoranthene | **1.96** |
| Chrysene | **4.91** |

| Sample Name | GPEC-SB-2 (30-32) | GPEC-SB-XX-040109 |
|---|---|---|
| Start Depth (ft) | 30 | 30 |
| End Depth (ft) | 32 | 32 |
| Sample Date | 4/1/2009 | 4/1/2009 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Ethylbenzene | **0.24 J** | **39 J** |
| **PAHs (mg/kg)** | | |
| Naphthalene | **33** | **30** |
| Benz[a]anthracene | **5.3** | **4.2** |
| Benzo[a]pyrene | **4.8** | **3.8 J** |
| Benzo[b]fluoranthene | **4.1** | **2.5 J** |
| Chrysene | **5** | **4 J** |
| **Metals (mg/kg)** | | |
| Arsenic | **13.3 J** | **50.6 J** |
| Mercury | **0.13 J** | **2 J** |

| Sample Name | GPEC-SB-105 (39-40) | GPECXX 060210 |
|---|---|---|
| Start Depth (ft) | 39 | 39 |
| End Depth (ft) | 40 | 40 |
| Sample Date | 6/2/2010 | 6/2/2010 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Benzene | **5.5 J** | 18 U |
| Toluene | **10 J** | 27 U |
| Ethylbenzene | **140** | **200** |
| **PAHs (mg/kg)** | | |
| Acenaphthene | **673** | **593** |
| 2-Methylnaphthalene | **1920** | **1690** |
| Naphthalene | **2620** | **2280** |
| Benz[a]anthracene | **120** | **106** |
| Benzo[a]pyrene | **76** | **69.4** |
| Benzo[b]fluoranthene | **38.2** | **35.4** |
| Benzo[k]fluoranthene | **37.5** | **31.9** |
| Chrysene | **106** | **98.6** |
| Dibenz[a,h]anthracene | **7.33** | **7.56** |
| Indeno[1,2,3-cd]pyrene | **21.9** | **20** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **35.1** | **39.8** |
| **Metals (mg/kg)** | | |
| Arsenic | **51 J** | **53 J** |
| Mercury | **2.2** | **1.6** |

AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
AREA 6
AREA 7
AREA 8
AREA 9
NEWTOWN CREEK

***LEGEND***

- BORING LOCATION
- EQUITY RI SOIL BORING (AECOM)

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM SATURATION OR OTHER UNNATURAL) SATURATION & SHEENS
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- WOOD CHIPS/BLUE DISCOLORATIONS /SULFER-LIKE ODOR
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND.

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants
455 WINDING BROOK DRIVE
SUITE 201
GLASTONBURY, CONNECTICUT 06033

INTERMEDIATE SUBSURFACE SOIL ANALYTICAL SUMMARY (25 - 60 FT BGS)

June 2026 Plate 10

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Soil Analytical Intermediate_250409.mxd

| Sample Name | GPEC-SB503 |
|---|---|
| Start Depth | 119 |
| End Depth | 120 |
| Sample Date | 1/11/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.135 D** |

| Sample Name | GPEC-SB502 (112-113) |
|---|---|
| Start Depth | 112 |
| End Depth | 113 |
| Sample Date | 1/12/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.062 J** |

| Sample Name | GPEC-SB505 |
|---|---|
| Start Depth | 113 |
| End Depth | 114 |
| Sample Date | 1/10/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.051 DJ** |

| Sample Name | GPEC-SB504 |
|---|---|
| Start Depth | 119 |
| End Depth | 120 |
| Sample Date | 1/8/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.061 DJ** |

| Sample Name | GPEC-SB514 |
|---|---|
| Start Depth | 108 |
| End Depth | 109 |
| Sample Date | 1/22/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.131 D** |

| Sample Name | GPEC-SB513 (87-88) |
|---|---|
| Start Depth | 87 |
| End Depth | 88 |
| Sample Date | 1/19/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.108 J** |

| Sample Name | GPEC-SB501 |
|---|---|
| Start Depth | 99 |
| End Depth | 100 |
| Sample Date | 1/2/2018 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.173 D** |

| Sample Name | GPEC-SB220 (86-87) |
|---|---|
| Start Depth | 86 |
| End Depth | 87 |
| Sample Date | 7/13/2012 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.07** |

| Sample Name | GPEC-SB522 (85-86) |
|---|---|
| Start Depth (ft.) | 85 |
| End Depth (ft.) | 86 |
| Sample Date | 4/18/2019 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| Arsenic | **17.8** |
| Manganese | **2140** |
| Mercury | 0.026 U |

| Sample Name | GPEC-SB-3 (102-104) | GPEC-SB-XX-041709 | GPEC-SB-3 (110-112) |
|---|---|---|---|
| Start Depth | 102 | 102 | 110 |
| End Depth | 104 | 104 | 112 |
| Sample Date | 4/17/2009 | 4/17/2009 | 4/17/2009 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Toluene | **14 J** | **13 J** | **0.00092 J** |
| Ethylbenzene | **110** | **110** | **0.0028 J** |
| Total Xylene | **120** | **110** | **0.0027 J** |
| **PAHs (mg/kg)** | | | |
| Acenaphthene | **170 J** | **99 J** | **0.082 J** |
| Acenaphthylene | **650** | **400** | **0.092 J** |
| 2-Methylnaphthalene | **130 J** | **79 J** | **0.096 J** |
| Naphthalene | **3200 J** | **1800 J** | **1.8** |
| Phenanthrene | **1100 J** | **650 J** | **0.78** |
| Benz[a]anthracene | **160 J** | **110 J** | **0.12 J** |
| Benzo[a]pyrene | **180** | **110 J** | **0.12 J** |
| Benzo[b]fluoranthene | **94 J** | **63 J** | **0.072 J** |
| Benzo[k]fluoranthene | **35 J** | **21 J** | 0.32 U |
| Chrysene | **140 J** | **90 J** | **0.1 J** |
| Indeno[1,2,3-cd]pyrene | **49 J** | **30 J** | 0.32 U |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **59 J** | **35 J** | **0.039 J** |
| **Metals (mg/kg)** | | | |
| Manganese | **189 J** | **123 J** | **3910 J** |

| Sample Name | GPEC-SB-106 (102-103) | GPEC-SB-106 (104-105) |
|---|---|---|
| Start Depth | 102 | 104 |
| End Depth | 103 | 105 |
| Sample Date | 6/8/2010 | 6/8/2010 |
| **Analyte** | | |
| **BTEX (mg/kg)** | | |
| Toluene | **24 J** | **0.0043 J** |
| Ethylbenzene | **54** | **0.0093** |
| **Other VOCs (mg/kg)** | | |
| Carbon disulfide | **77 J** | **0.0083 J** |
| Methylene chloride | **49 J** | 0.031 U |
| **PAHs (mg/kg)** | | |
| Acenaphthylene | **457** | **27.7** |
| 2-Methylnaphthalene | **1210** | **68.2** |
| Naphthalene | **2570** | **124** |
| Benz[a]anthracene | **99** | **8.22** |
| Benzo[a]pyrene | **83.2** | **7.12** |
| Benzo[b]fluoranthene | **42** | **4.22** |
| Benzo[k]fluoranthene | **38.1** | **2.31** |
| Chrysene | **73.6** | **6.72** |
| Dibenz[a,h]anthracene | **8** | **0.681 J** |
| Indeno[1,2,3-cd]pyrene | **24.6** | **2.18 J** |
| **Other SVOCs (mg/kg)** | | |
| Dibenzofuran | **42.8** | **3.36** |

| Sample Name | GPEC-SB207 (75.5-77) |
|---|---|
| Start Depth | 75.5 |
| End Depth | 77 |
| Sample Date | 6/26/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **79.9** |
| Total Xylene | **52.4** |
| **PAHs (mg/kg)** | |
| Acenaphthene | **1450** |
| Acenaphthylene | **224** |
| Fluorene | **1060** |
| 2-Methylnaphthalene | **659** |
| Naphthalene | **5490** |
| Phenanthrene | **2590** |
| Pyrene | **1300** |
| Benz[a]anthracene | **383** |
| Benzo[a]pyrene | **372** |
| Benzo[b]fluoranthene | **120** |
| Benzo[k]fluoranthene | **200** |
| Chrysene | **401** |
| Dibenz[a,h]anthracene | **45.6 J** |
| Indeno[1,2,3-cd]pyrene | **103** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **124** |

| Sample Name | GPEC-SB206 (69-70) |
|---|---|
| Start Depth | 69 |
| End Depth | 70 |
| Sample Date | 6/27/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Ethylbenzene | **4.01** |
| Total Xylene | **3.57** |
| **PAHs (mg/kg)** | |
| Naphthalene | **158** |
| Benz[a]anthracene | **9.12** |
| Benzo[a]pyrene | **8.98** |
| Benzo[b]fluoranthene | **3.19** |
| Benzo[k]fluoranthene | **4.67** |
| Chrysene | **9.44** |

| Sample Name | GPEC-SB-105 (79-80) | GPEC-SB-105 (88-89) | GPEC-SB-105 (103-105) |
|---|---|---|---|
| Start Depth | 78 | 88 | 103 |
| End Depth | 80 | 89 | 105 |
| Sample Date | 6/2/2010 | 6/2/2010 | 6/2/2010 |
| **Analyte** | | | |
| **BTEX (mg/kg)** | | | |
| Ethylbenzene | **1.5** | **200** | 0.0032 U |
| **PAHs (mg/kg)** | | | |
| Acenaphthene | **50.1** | **219** | 0.237 U |
| Acenaphthylene | **9** | **321** | 0.237 U |
| 2-Methylnaphthalene | **46.3** | **262** | 0.237 U |
| Naphthalene | **127** | **3140** | **0.0142 J** |
| Benz[a]anthracene | **13** | **132** | 0.237 U |
| Benzo[a]pyrene | **10.5** | **109** | 0.237 U |
| Benzo[b]fluoranthene | **4 J** | **65.7** | 0.237 U |
| Benzo[k]fluoranthene | **5.8** | **36.3** | 0.237 U |
| Chrysene | **11.3** | **113** | 0.237 U |
| Dibenz[a,h]anthracene | **1 J** | **13.2** | 0.237 U |
| Indeno[1,2,3-cd]pyrene | **3 J** | **34.4** | 0.237 U |
| **Other SVOCs (mg/kg)** | | | |
| Dibenzofuran | **5.5** | **55.1** | 0.237 U |
| **Metals (mg/kg)** | | | |
| Manganese | **210 J** | **220 J** | **2200** |

| Sample Name | GPEC-SB205 (71-72) |
|---|---|
| Start Depth | 71 |
| End Depth | 72 |
| Sample Date | 7/2/2012 |
| **Analyte** | |
| **BTEX (mg/kg)** | |
| Toluene | **9.51 J** |
| Ethylbenzene | **117** |
| Total Xylene | **106** |
| **PAHs (mg/kg)** | |
| Acenaphthene | **281** |
| 2-Methylnaphthalene | **497** |
| Naphthalene | **1120** |
| Benz[a]anthracene | **68.8** |
| Benzo[a]pyrene | **71** |
| Benzo[b]fluoranthene | **28.2** |
| Benzo[k]fluoranthene | **30.5** |
| Chrysene | **74** |
| **Other SVOCs (mg/kg)** | |
| Dibenzofuran | **19.8** |

| Sample Name | GPEC-SB202 (80-81) | GPGC-XX111211 |
|---|---|---|
| Start Depth | 80 | 80 |
| End Depth | 81 | 81 |
| Sample Date | 11/12/2011 | 11/12/2011 |
| **Analyte** | | |
| **Other VOCs (mg/kg)** | | |
| Acetone | **0.071 J** | **0.053 J** |
| Methylene chloride | **0.027 J** | **0.019 J** |

| Sample Name | GPEC-SB334 (74-75) |
|---|---|
| Start Depth | 74 |
| End Depth | 75 |
| Sample Date | 7/16/2015 |
| **Analyte** | |
| **Other VOCs (mg/kg)** | |
| Acetone | **0.067 D** |

| Sample Name | GPEC-SB222 (98-99) |
|---|---|
| Start Depth | 98 |
| End Depth | 99 |
| Sample Date | 6/29/2012 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| Arsenic | **17.3** |

GPEC-SB503 MW-2D GPEC-SB/MW502 GPEC-SB/MW537 GPEC-SB/MW538 GPEC-SB216 GPE-MW2D2 GPEC-SB215 GPEC-SB13/MW-13 GPEC-SB218 GPEC-SB536 GPEC-SB505/MW505D GPEC-SB504 GPEC-SB535 GPEC-SB701 GPEC-SB702 GPEC-SB214 GPEC-SB217 GPEC-SB213 AREA 6 AREA 8 GPEC-SB534 GPEC-SB05C/MW-5D GPEC-MW5D2 GPEC-SB/MW514 GPEC-SB219 GPEC-SB532 GPEC-SB531 GPEC-SB212 GPEC-SB501 GPEC-SB530 GPEC-SB801 GPEC-SB803 GPEC-MW401 GPEC-SB802 GPEC-SB211 GPEC-SB513/MW513D GPEC-SB09/MW-9 GPEC-SB529 GPEC-SB533 AREA 2 GPEC-SB210 GPEC-SB528 GPEC-SB527 GPEC-SB08/MW-8 GPEC-SB04C/MW-4 GPEC-MW4D AREA 9 GPEC-SB516 GPEC-SB515 GPEC-SB519 GPEC-SB520 GPEC-SB522 GPEC-SB524 GPEC-SB209 GPEC-SB208 GPEC-SB107/MW-11D GPEC-MW402 GPEC-SB11/MW-11 GPEC-SB03/MW-3D GPEC-SB106/MW-3WT GPEC-SB220 GPEC-SB512 GPEC-SB12/MW-12 GPEC-SB401 GPEC-MW409 GPEC-SB402 GPEC-SB410 GPEC-SB412 GPEC-SB207 GPEC-SB409 GPEC-SB411 GPEC-SB413 GPEC-SB07/MW-7D GPEC-SB511 GPEC-SB221 GPEC-SB404 GPEC-SB405 GPEC-MW407 GPEC-SB406 GPEC-SB408 GPEC-SB206 AREA 7 AREA 5 GPEC-SB02/MW-2 GPEC-MW406 GPEC-SB/MW339D GPEC-SB105/MW-2D AREA 3 GPEC-SB400 GPEC-SB201/MW201 GPEC-SB10/MW-10 GPEC-MW405 GPEC-SB403 GPEC-SB104 AREA 1 GPEC-SB/MW205 GPEC-SB101A/MW-101D GPEC-SB108/MW-101I GPEC-MW1D AREA 4 GPEC-SB103 GPEC-SB-81B/MW01R GPEC-SB202 GPEC-SB204 GPEC-SB904 GPEC-SB222 GPEC-SB203 GPEC-SB902 GPEC-SB-33 GPEC-SB/MW344D GPEC-SB/MW333D GPEC-SB334 GPEC-SB331 GPEC-SB332 SB-28 GPEC-SB901 GPEC-SB902 SB-27 GPEC-SB/MW328D GPEC-SB328I GPEC-SB319 GPEC-GT01 (MW) GPEC-GT04D (MW) GPEC-GT5D GPEC-SB306 GPEC-SB902 GPEC-GT08 GPEC-SB12/MW-102D GPEC-GT10D (MW) AREA 4 NEWTOWN CREEK

**LEGEND**

- BORING LOCATION
- EQUITY RI SOIL BORING (AECOM)

**IMPACTS**

- NAPL SATURATED
- NAPL COATED MATERIAL
- NAPL BLEBS, GLOBS, SHEEN
- STAINING, ODOR
- INDUSTRIAL IMPACTS- (PETROLEUM OR OTHER UNNATURAL) STAINING & ODORS
- NO OBSERVED IMPACTS
- TOTAL PAH ISO CONCENTRATION LINE > 500 mg/kg
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH ESRI WORLD IMAGERY.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY INDIVIDUAL BTEX OR PAH COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

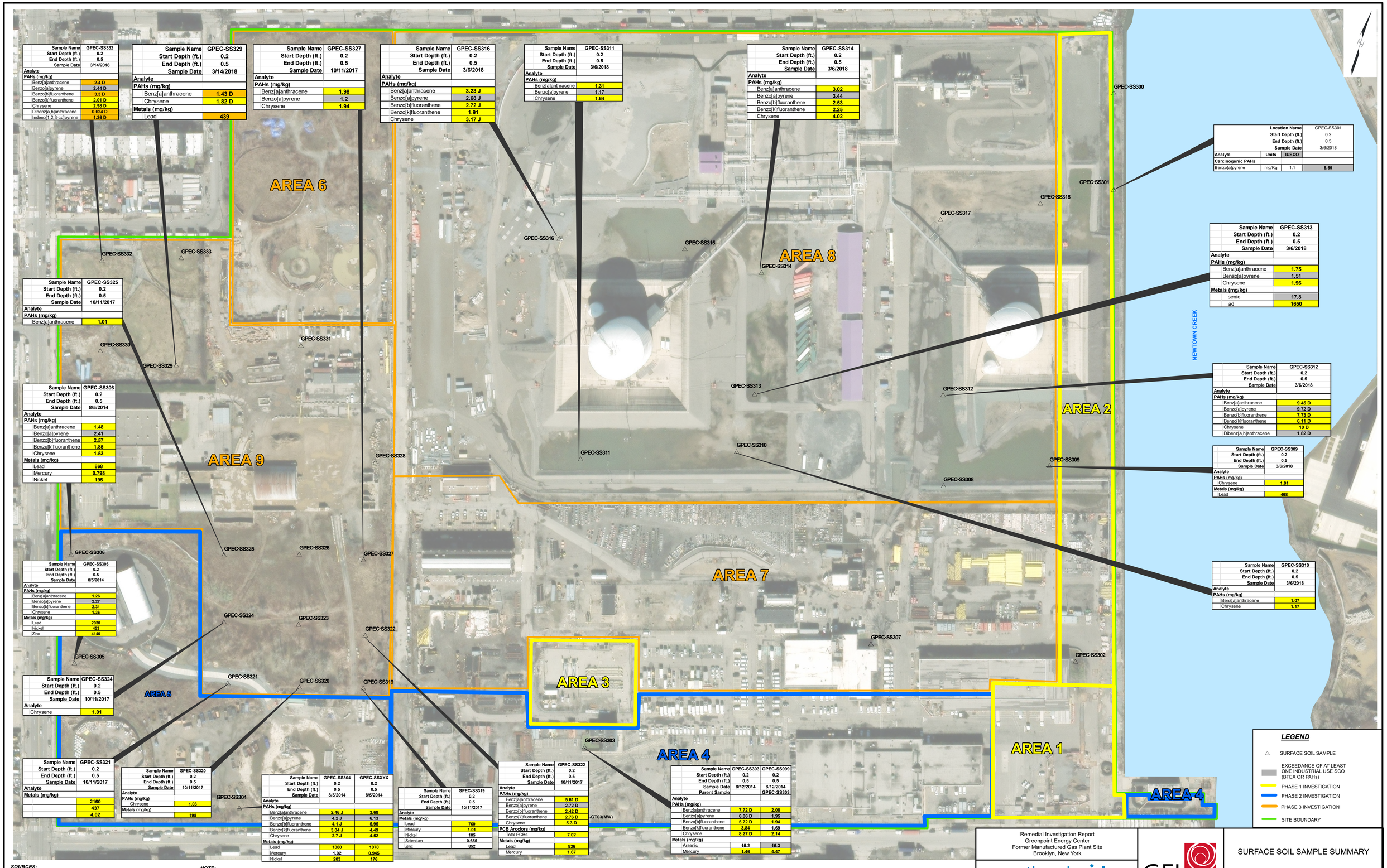
PROJECT 125180

GEI Consultants

DEEP SUBSURFACE SOIL ANALYTICAL SUMMARY ( > 60 FT BGS)

June 2026 Plate 11

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Soil Analytical Deep_250327_250409.mxd




| Sample Name | GPEC-SS332 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/14/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 2.4 D |
| Benzo[a]pyrene | 2.44 D |
| Benzo[b]fluoranthene | 3.3 D |
| Benzo[k]fluoranthene | 2.01 D |
| Chrysene | 2.98 D |
| Dibenz[a,h]anthracene | 0.624 D |
| Indeno[1,2,3-cd]pyrene | 1.26 D |

| Sample Name | GPEC-SS329 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/14/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.43 D |
| Chrysene | 1.82 D |
| **Metals (mg/kg)** | |
| Lead | 439 |

| Sample Name | GPEC-SS327 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.98 |
| Benzo[a]pyrene | 1.2 |
| Chrysene | 1.94 |

| Sample Name | GPEC-SS316 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.23 J |
| Benzo[a]pyrene | 2.68 J |
| Benzo[b]fluoranthene | 2.72 J |
| Benzo[k]fluoranthene | 1.91 |
| Chrysene | 3.17 J |

| Sample Name | GPEC-SS311 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.31 |
| Benzo[a]pyrene | 1.17 |
| Chrysene | 1.64 |

| Sample Name | GPEC-SS314 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 3.02 |
| Benzo[a]pyrene | 3.44 |
| Benzo[b]fluoranthene | 2.53 |
| Benzo[k]fluoranthene | 2.25 |
| Chrysene | 4.02 |

| Location Name | GPEC-SS301 | | |
|---|---|---|---|
| Start Depth (ft.) | 0.2 | | |
| End Depth (ft.) | 0.5 | | |
| Sample Date | 3/6/2018 | | |
| **Analyte** | **Units** | **IUSCO** | |
| **Carcinogenic PAHs** | | | |
| Benzo[a]pyrene | mg/Kg | 1.1 | 5.59 |

| Sample Name | GPEC-SS313 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.75 |
| Benzo[a]pyrene | 1.51 |
| Chrysene | 1.96 |
| **Metals (mg/kg)** | |
| senic | 17.8 |
| ad | 1650 |

| Sample Name | GPEC-SS325 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.01 |

| Sample Name | GPEC-SS306 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 8/5/2014 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.48 |
| Benzo[a]pyrene | 2.41 |
| Benzo[b]fluoranthene | 2.57 |
| Benzo[k]fluoranthene | 1.85 |
| Chrysene | 1.53 |
| **Metals (mg/kg)** | |
| Lead | 868 |
| Mercury | 0.798 |
| Nickel | 195 |

| Sample Name | GPEC-SS312 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 9.45 D |
| Benzo[a]pyrene | 9.72 D |
| Benzo[b]fluoranthene | 7.73 D |
| Benzo[k]fluoranthene | 6.11 D |
| Chrysene | 10 D |
| Dibenz[a,h]anthracene | 1.82 D |

| Sample Name | GPEC-SS309 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Chrysene | 1.01 |
| **Metals (mg/kg)** | |
| Lead | 468 |

| Sample Name | GPEC-SS305 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 8/5/2014 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.26 |
| Benzo[a]pyrene | 2.27 |
| Benzo[b]fluoranthene | 2.31 |
| Chrysene | 1.36 |
| **Metals (mg/kg)** | |
| Lead | 2030 |
| Nickel | 453 |
| Zinc | 4140 |

| Sample Name | GPEC-SS310 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 3/6/2018 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 1.07 |
| Chrysene | 1.17 |

| Sample Name | GPEC-SS324 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| Chrysene | 1.01 |

| Sample Name | GPEC-SS321 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| | 2160 |
| | 437 |
| | 4.02 |

| Sample Name | GPEC-SS320 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Chrysene | 1.03 |
| **Metals (mg/kg)** | |
| | 198 |

| Sample Name | GPEC-SS304 | GPEC-SSXXX |
|---|---|---|
| Start Depth (ft.) | 0.2 | 0.2 |
| End Depth (ft.) | 0.5 | 0.5 |
| Sample Date | 8/5/2014 | 8/5/2014 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 2.46 J | 3.68 |
| Benzo[a]pyrene | 4.2 J | 6.13 |
| Benzo[b]fluoranthene | 4.1 J | 5.95 |
| Benzo[k]fluoranthene | 3.04 J | 4.49 |
| Chrysene | 2.7 J | 4.52 |
| **Metals (mg/kg)** | | |
| Lead | 1080 | 1070 |
| Mercury | 1.02 | 0.945 |
| Nickel | 203 | 176 |

| Sample Name | GPEC-SS319 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **Metals (mg/kg)** | |
| Lead | 760 |
| Mercury | 1.01 |
| Nickel | 105 |
| Selenium | 0.655 |
| Zinc | 852 |

| Sample Name | GPEC-SS322 |
|---|---|
| Start Depth (ft.) | 0.2 |
| End Depth (ft.) | 0.5 |
| Sample Date | 10/11/2017 |
| **Analyte** | |
| **PAHs (mg/kg)** | |
| Benz[a]anthracene | 5.61 D |
| Benzo[a]pyrene | 2.72 D |
| Benzo[b]fluoranthene | 2.42 D |
| Benzo[k]fluoranthene | 2.76 D |
| Chrysene | 5.3 D |
| **PCB Aroclors (mg/kg)** | |
| Total PCBs | 7.02 |
| **Metals (mg/kg)** | |
| Lead | 836 |
| Mercury | 1.67 |

| Sample Name | GPEC-SS303 | GPEC-SS999 |
|---|---|---|
| Start Depth (ft.) | 0.2 | 0.2 |
| End Depth (ft.) | 0.5 | 0.5 |
| Sample Date | 8/12/2014 | 8/12/2014 |
| Parent Sample | | GPEC-SS303 |
| **Analyte** | | |
| **PAHs (mg/kg)** | | |
| Benz[a]anthracene | 7.72 D | 2.08 |
| Benzo[a]pyrene | 6.06 D | 1.95 |
| Benzo[b]fluoranthene | 5.72 D | 1.94 |
| Benzo[k]fluoranthene | 3.84 | 1.69 |
| Chrysene | 8.27 D | 2.14 |
| **Metals (mg/kg)** | | |
| Arsenic | 15.2 | 16.3 |
| Mercury | 1.46 | 4.47 |

***LEGEND***

- SURFACE SOIL SAMPLE
- EXCEEDANCE OF AT LEAST ONE INDUSTRIAL USE SCO (BTEX OR PAHs)
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE IUSCOS FOR ANY COMPOUND

0 50 100 200
SCALE: 1" = 100'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

# SURFACE SOIL SAMPLE SUMMARY

June 2026 Plate 12

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Surface Soil Analytical Summary_250409.mxd

| Sample Name | | MW-2 | MW-2 |
|---|---|---|---|
| Sample Date | | 7/16/2009 | 12/14/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **3249** | **563.61** |
| Total PAH | ug/L | ND | ND |

| Sample Name | | MW-3 | MW-3 |
|---|---|---|---|
| Sample Date | | 7/23/2009 | 12/17/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **156.3** | **132.11** |
| Total PAH | ug/L | ND | ND |

| Sample Name | | PZ-1 |
|---|---|---|
| Sample Date | | 12/17/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **64.361** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW-13 | GPEC-MW-13 |
|---|---|---|---|
| Sample Date | | 7/24/2009 | 12/14/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **48.2** | **14.854** |
| Total PAH | ug/L | ND | ND |

| Sample Name | | GPEC-MW537 |
|---|---|---|
| Sample Date | | 7/19/2019 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **35.43** |
| Total PAH | ug/L | ND |

| Sample Name | | GPE-MW-1S |
|---|---|---|
| Sample Date | | 7/21/2009 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **32.8** |
| Total PAH | ug/L | ND |

| Sample Name | | MW-4 | MW-4 |
|---|---|---|---|
| Sample Date | | 7/23/2009 | 12/18/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **84.3** | **69.305** |
| Total PAH | ug/L | ND | ND |

| Sample Name | | GPEC-MW505S |
|---|---|---|
| Sample Date | | 6/18/2019 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **137.619** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW514 |
|---|---|---|
| Sample Date | | 6/17/2019 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **461.87** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW513S |
|---|---|---|
| Sample Date | | 6/17/2019 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **2.193** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW-12 | GPEC-MW-12 |
|---|---|---|---|
| Sample Date | | 7/15/2009 | 12/17/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **46.8** | **42.83** |
| Total CVOC | ug/L | ND | **0.974** |
| Total PAH | ug/L | **26.89** | **142.146** |

| Sample Name | | GPEC-MW221S |
|---|---|---|
| Sample Date | | 12/13/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | **73.9** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | ND |

| Sample Name | | MW-339S |
|---|---|---|
| Sample Date | | 12/22/2015 |
| Analyte | Units | |
| Total BTEX | ug/L | **14.927** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **26.125** |

| Sample Name | | GPEC-MW-344S |
|---|---|---|
| Sample Date | | 12/23/2015 |
| Analyte | Units | |
| Total BTEX | ug/L | **3.688** |
| Total CVOC | ug/L | **1.83** |
| Total PAH | ug/L | **1.472** |

| Sample Name | | GPEC-MW222S |
|---|---|---|
| Sample Date | | 12/13/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **50.156** |

| Sample Name | | PZ-2 | PZ-2 |
|---|---|---|---|
| Sample Date | | 7/23/2009 | 12/21/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **2.3** | **2.692** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **7.56** | **2.04** |

| Sample Name | | GPEC-MW-2 | GPEC-MW-2 |
|---|---|---|---|
| Sample Date | | 7/16/2009 | 12/19/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **64.3** | **19.35** |
| Total CVOC | ug/L | ND | **1.19** |
| Total PAH | ug/L | **746.5** | **196.492** |

| Sample Name | | GPEC-MW202 |
|---|---|---|
| Sample Date | | 11/14/2011 |
| Analyte | Units | |
| Total BTEX | ug/L | **3.71** |
| Total CVOC | ug/L | **2.4** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-GT-10S |
|---|---|---|
| Sample Date | | 10/20/2009 |
| Analyte | Units | |
| Total BTEX | ug/L | **5.8** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **166.56** |

| Sample Name | | GPEC-MW201 |
|---|---|---|
| Sample Date | | 12/5/2011 |
| Analyte | Units | |
| Total BTEX | ug/L | **35.3** |
| Total CVOC | ug/L | **64.68** |
| Total PAH | ug/L | **577** |

| Sample Name | | GPEC-GT03 | GPEC-GT03 |
|---|---|---|---|
| Sample Date | | 10/21/2009 | 12/20/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **50950** | **44072** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **10340** | **3654.12** |

| Sample Name | | GPEC-GT04S | GPEC-GT04S |
|---|---|---|---|
| Sample Date | | 10/20/2009 | 12/20/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **1926** | **170000** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **6.2** | **51.932** |

| Sample Name | | GPEC-GT05 | GPEC-GT05 |
|---|---|---|---|
| Sample Date | | 10/21/2009 | 12/20/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **455100** | **269990** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **4905** | **1282.9** |

| Sample Name | | W-1 | W-1 |
|---|---|---|---|
| Sample Date | | 7/28/2009 | 12/19/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **15050** | **13683** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **12459** | **4577.8** |

| Sample Name | | W-2 | W-2 |
|---|---|---|---|
| Sample Date | | 7/28/2009 | 12/19/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **14270** | **5602.9** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **12330** | **3412.7** |

MW-2
PZ-1
MW-3
GPEC-MW537
GPEC-MW538
GPE-MW1S
GPE-MW2S
GPE-MW3S
GPE-MW4S
GPEC-MW13
MW-4
GPEC-MW505S
AREA 6
MW-5
GPEC-MW217S
PZ-2
GPEC-MW514
GPEC-MW219S
AREA 8
NEWTOWN CREEK
GPEC-MW9
AREA 2
GPEC-MW513
AREA 9
GPEC-MW220S
GPEC-MW12
GPEC-MW3WT
GPEC-MW221S
AREA 7
GPEC-MW339S
GPEC-MW2
GPEC-MW201
GPEC-MW6
AREA 3
AREA 5
GPEC-RW304
GPEC-MW101WT
AREA 1
AREA 4
GPEC-MW222S
GPEC-MW202
GPEC-GT10S (MW)
AREA 4
GPEC-MW344S
GPEC-RW332
GPEC-GT03 (MW)
GPEC-GT04S (MW)
GPEC-GT05 (MW)
W-1
W-2
GPEC-GT1S

***LEGEND***

- MONITORING WELL
- PIEZOMETER
- INVESTIGATION RECOVERY WELL
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

# SHALLOW GROUNDWATER ANALYTICAL SUMMARY

June 2026

Plate 13

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Shallow_250409.mxd

| Sample Name | | GPEC-MW218I |
|---|---|---|
| Sample Date | | 12/14/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **27.51** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW217I |
|---|---|---|
| Sample Date | | 12/20/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **1.46** |
| Total PAH | ug/L | **46.757** |

| Sample Name | | GPE-MW-1D | GPE-MW-1D |
|---|---|---|---|
| Sample Date | | 7/21/2009 | 12/13/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **200.6** | **64.01** |
| Total PAH | ug/L | ND | ND |

| Sample Name | | GPEC-MW219I |
|---|---|---|
| Sample Date | | 12/17/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **8.514** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW513D |
|---|---|---|
| Sample Date | | 6/17/2019 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **938.919** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW221I |
|---|---|---|
| Sample Date | | 12/13/2012 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **96.11** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW-339I |
|---|---|---|
| Sample Date | | 12/8/2015 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **163.61** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW-8 |
|---|---|---|
| Sample Date | | 7/22/2009 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **16.4** |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-MW-4 |
|---|---|---|
| Sample Date | | 7/23/2009 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **3.4** |
| Total PAH | ug/L | **24.94** |

| Sample Name | | GPEC-MW-11 | GPEC-MW-11 |
|---|---|---|---|
| Sample Date | | 7/15/2009 | 12/17/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **85.3** | **1.05** |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **66.09** | **2.83** |

| Sample Name | | GPEC-MW410 |
|---|---|---|
| Sample Date | | 3/27/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | **8.58** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **81.37** |

| Sample Name | | GPEC-MW-3S | GPEC-MW-3S |
|---|---|---|---|
| Sample Date | | 7/27/2009 | 12/19/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **70** | ND |
| Total CVOC | ug/L | ND | ND |
| Total PAH | ug/L | **341.9** | **1.427** |

| Sample Name | | GPEC-MW409 |
|---|---|---|
| Sample Date | | 3/24/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | **0.545** |
| Total CVOC | ug/L | **1.1** |
| Total PAH | ug/L | **4.057** |

| Sample Name | | GPEC-MW405 |
|---|---|---|
| Sample Date | | 3/28/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | **3.28** |
| Total CVOC | ug/L | **8.476** |
| Total PAH | ug/L | **92.48** |

| Sample Name | | GPEC-MW404 |
|---|---|---|
| Sample Date | | 3/28/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | ND |
| Total CVOC | ug/L | **3.947** |
| Total PAH | ug/L | **5.881** |

| Sample Name | | GPEC-MW-103 | GPEC-MW-103 |
|---|---|---|---|
| Sample Date | | 8/31/2010 | 12/20/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **445.1** | **36.583** |
| Total CVOC | ug/L | **12.4** | **7.112** |
| Total PAH | ug/L | **1226.4** | **2.64** |

| Sample Name | | GPEC-MW344I |
|---|---|---|
| Sample Date | | 12/23/2015 |
| Analyte | Units | |
| Total BTEX | ug/L | **2.318** |
| Total CVOC | ug/L | **286.74** |
| Total PAH | ug/L | **0.218** |

| Sample Name | | GPEC-MW333I |
|---|---|---|
| Sample Date | | 1/7/2016 |
| Analyte | Units | |
| Total BTEX | ug/L | **72.324** |
| Total CVOC | ug/L | **292.966** |
| Total PAH | ug/L | **9.923** |

| Sample Name | | GPEC-MW332I |
|---|---|---|
| Sample Date | | 3/24/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | **196** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **450.3** |

| Sample Name | | GPEC-GT01 |
|---|---|---|
| Sample Date | | 10/22/2009 |
| Analyte | Units | |
| Total BTEX | ug/L | **1.3** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | ND |

| Sample Name | | GPEC-GT04D | GPEC-GT04D |
|---|---|---|---|
| Sample Date | | 10/20/2009 | 12/20/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | **0.84** | **1.94** |
| Total CVOC | ug/L | **14.09** | **17.856** |
| Total PAH | ug/L | ND | **0.811** |

| Sample Name | | GPEC-GT5I |
|---|---|---|
| Sample Date | | 3/21/2017 |
| Analyte | Units | |
| Total BTEX | ug/L | **4340** |
| Total CVOC | ug/L | ND |
| Total PAH | ug/L | **44.74** |

| Sample Name | | GPEC-GT07 | GPEC-GT07 |
|---|---|---|---|
| Sample Date | | 10/22/2009 | 12/18/2012 |
| Analyte | Units | | |
| Total BTEX | ug/L | ND | ND |
| Total CVOC | ug/L | **6.8** | **10.818** |
| Total PAH | ug/L | ND | ND |

AREA 6
AREA 8
AREA 2
AREA 9
AREA 7
AREA 3
AREA 5
AREA 4
AREA 1
AREA 4

GPEC-MW218I
GPEC-MW217I
GPE-MW1D
GPE-MW2D
GPE-MW-3D
GPE-MW4D
GPEC-MW219I
GPEC-MW-5S
GPEC-MW513D
GPEC-MW-8
GPEC-MW-4
GPEC-MW221I
GPEC-MW11
GPEC-MW410
GPEC-MW-3S
GPEC-MW409
GPEC-MW408
GPEC-MW339I
GPEC-MW221I
GPEC-MW-10
GPEC-RW304
GPEC-MW405
GPEC-MW404
GPEC-MW403
GPEC-MW103
GPEC-MW344I
GPEC-MW333I
GPEC-MW332I
GPEC-RW332
GPEC-GT01
GPEC-MW-328I
GPEC-GT04D (MW)
GPEC-GT5I
GPEC-MW306
GPEC-GT07 (MW)
GPEC-GT4D (MW)

NEWTOWN CREEK

**LEGEND**

- MONITORING WELL
- PIEZOMETER
- INVESTIGATION RECOVERY WELL
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

**SOURCES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

**NOTE:**
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

# INTERMEDIATE GROUNDWATER ANALYTICAL SUMMARY

June 2026 Plate 14

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Intermediate_250409.mxd

| Sample Name | GPEC-MW505D |
|---|---|
| Sample Date | 6/18/2019 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **299.391** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW502 |
|---|---|
| Sample Date | 6/18/2019 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **551.695** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW218D |
|---|---|
| Sample Date | 12/14/2012 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **41.03** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW217D |
|---|---|
| Sample Date | 12/20/2012 |
| Analyte / Units | |
| Total BTEX ug/L | **0.403** |
| Total CVOC ug/L | **123.45** |
| Total PAH ug/L | **0.686** |

| Sample Name | GPEC-MW219D |
|---|---|
| Sample Date | 12/17/2012 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **607** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW-5D | GPEC-MW-5D |
|---|---|---|
| Sample Date | 7/22/2009 | 12/20/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | **37.9** | **7.24** |
| Total CVOC ug/L | **1.5** | ND |
| Total PAH ug/L | **125.4** | **0.756** |

| Sample Name | GPEC-MW11D | GPEC-MW11D |
|---|---|---|
| Sample Date | 8/30/2010 | 12/17/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | ND | ND |
| Total CVOC ug/L | **8.1** | **11.56** |
| Total PAH ug/L | ND | ND |

| Sample Name | GPEC-MW221D |
|---|---|
| Sample Date | 12/13/2012 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **93.21** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW4D |
|---|---|
| Sample Date | 3/20/2017 |
| Analyte / Units | |
| Total BTEX ug/L | **0.995** |
| Total CVOC ug/L | **237.724** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW220D |
|---|---|
| Sample Date | 12/18/2012 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **11.726** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW-3D | GPEC-MW-3D |
|---|---|---|
| Sample Date | 7/17/2009 | 12/19/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | **885** | **281.32** |
| Total CVOC ug/L | **29.9** | **47.24** |
| Total PAH ug/L | **3736** | **234.51** |

| Sample Name | GPEC-MW-7D | GPEC-MW-7D |
|---|---|---|
| Sample Date | 7/27/2009 | 12/21/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | ND | **0.348** |
| Total CVOC ug/L | **42.49** | **20.121** |
| Total PAH ug/L | ND | **5.255** |

| Sample Name | GPEC-MW-339D |
|---|---|
| Sample Date | 12/8/2015 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **41.99** |
| Total PAH ug/L | 1.4 |

| Sample Name | GPEC-MW407 |
|---|---|
| Sample Date | 3/27/2017 |
| Analyte / Units | |
| Total BTEX ug/L | **231.2** |
| Total CVOC ug/L | **19.49** |
| Total PAH ug/L | **745.3** |

| Sample Name | GPEC-MW406 |
|---|---|
| Sample Date | 3/27/2017 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **15.694** |
| Total PAH ug/L | **12.18** |

| Sample Name | GPEC-MW-344D |
|---|---|
| Sample Date | 12/9/2015 |
| Analyte / Units | |
| Total BTEX ug/L | **113.81** |
| Total CVOC ug/L | **811.2** |
| Total PAH ug/L | **22.055** |

| Sample Name | GPEC-MW-02D | GPEC-MW02D |
|---|---|---|
| Sample Date | 8/31/2010 | 12/18/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | **29** | **8.657** |
| Total CVOC ug/L | **87.2** | **68.84** |
| Total PAH ug/L | **909.6** | **84.88** |

| Sample Name | GPEC-MW1D |
|---|---|
| Sample Date | 3/24/2017 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **41.545** |
| Total PAH ug/L | **5.407** |

| Sample Name | GPEC-MW-333D |
|---|---|
| Sample Date | 1/7/2016 |
| Analyte / Units | |
| Total BTEX ug/L | **146.4** |
| Total CVOC ug/L | **1124.7** |
| Total PAH ug/L | **10.291** |

| Sample Name | GPEC-MW222D |
|---|---|
| Sample Date | 12/13/2012 |
| Analyte / Units | |
| Total BTEX ug/L | **19.408** |
| Total CVOC ug/L | **353.91** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW328D |
|---|---|
| Sample Date | 12/9/2015 |
| Analyte / Units | |
| Total BTEX ug/L | **0.624** |
| Total CVOC ug/L | **227.62** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW306D |
|---|---|
| Sample Date | 12/22/2015 |
| Analyte / Units | |
| Total BTEX ug/L | ND |
| Total CVOC ug/L | **2.31** |
| Total PAH ug/L | ND |

| Sample Name | GPEC-MW102D | GPEC-MW102D |
|---|---|---|
| Sample Date | 8/31/2010 | 12/18/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | ND | ND |
| Total CVOC ug/L | **14.9** | **14.5** |
| Total PAH ug/L | ND | ND |

| Sample Name | GPEC-MW-101(I) | GPEC-MW101I |
|---|---|---|
| Sample Date | 9/1/2010 | 12/14/2012 |
| Analyte / Units | | |
| Total BTEX ug/L | **0.77** | ND |
| Total CVOC ug/L | **20.1** | **8.8** |
| Total PAH ug/L | ND | ND |

GPEC-MW502
GPEC-MW505D
GPEC-MW218D
GPEC-MW217D
GPEC-MW219D
GPEC-MW5D
GPEC-MW11D
GPEC-MW4D
GPEC-MW3D
GPEC-MW7D
GPEC-MW407
GPEC-MW2D
GPEC-MW406
GPEC-MW1D
GPEC-MW101D
GPEC-MW101I
GPEC-MW102D
GPEC-MW306D
GPEC-MW328D
GPEC-MW222D
GPEC-MW333D
GPEC-MW344D
GPEC-MW339D
GPEC-MW220D
GPEC-MW221D

AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
AREA 6
AREA 7
AREA 8
AREA 9
AREA 4

NEWTOWN CREEK

**LEGEND**

- MONITORING WELL
- PIEZOMETER
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

**SOURCES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

**NOTE:**
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

# DEEP GROUNDWATER ANALYTICAL SUMMARY

June 2026 Plate 15

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Deep_250409.mxd

| Analyte | Units | Sample Name: GPEC-MW12 Sample Date: 11/1/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **15** |
| Ethylbenzene | | 5 | **6.3** |
| o-Xylene | | 5 | **11** |
| m/p-Xylene | | 5 | **10** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **110** |
| **Dissolved Metals** | ug/L | | |
| Barium | | 1000 | **3220** |
| Magnesium | | 35000* | **74400** |
| Sodium | | 20000 | **1430000** |
| **Total BTEX** | ug/L | -- | **44.2** |
| **Total CVOCs** | | -- | **3.4** |
| **Total PAHs** | | -- | **147.2** |

| Analyte | Units | Sample Name: MW-2 Sample Date: 11/8/2024 NYS AWQS | |
|---|---|---|---|
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **54** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **38500** |
| Selenium | | 10 | **10.6** |
| Sodium | | 20000 | **58100** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **57.36** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: MW-3 Sample Date: 10/31/2024 NYS AWQS | |
|---|---|---|---|
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **11** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **39500** |
| Sodium | | 20000 | **110000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **11.85** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW537 Sample Date: 11/21/2024 NYS AWQS | |
|---|---|---|---|
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **11** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **31600** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **13.9** |
| PFOA | | 6.7 | **275** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **11.44** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **1019.7** |

| Analyte | Units | Sample Name: GPEC-MW538 Sample Date: 11/21/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **52400** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPE-MW-1S Sample Date: 11/22/2024 NYS AWQS | |
|---|---|---|---|
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **13.9** |
| PFOA | | 6.7 | **45.3** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **194000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.36** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | | -- | **78.51** |

| Analyte | Units | Sample Name: GPE-MW-2S Sample Date: 12/4/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **79100** |
| Manganese | | 300 | **506** |
| Selenium | | 10 | **10.5** |
| Sodium | | 20000 | **481000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPE-MW-3S Sample Date: 11/18/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **86700** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.26** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPE-MW-4S Sample Date: 11/18/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **309 B** |
| Sodium | | 20000 | **35800** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW217S Sample Date: 12/3/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Antimony | | 3 | **4.3** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **20** |
| PFOA | | 6.7 | **44.5** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **154.03** |

| Analyte | Units | Sample Name: MW-4 Sample Date: 11/1/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **147000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW-9 Sample Date: 11/12/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **22600** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.64** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW-3WT Sample Date: 11/15/2024 NYS AWQS | |
|---|---|---|---|
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **4.63** |
| PFOA | | 6.7 | **8.26** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **389000** |
| Sodium | | 20000 | **3320000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **32.61** |

| Analyte | Units | Sample Name: GPEC-MW-2 Sample Date: 11/8/2024 NYS AWQS | |
|---|---|---|---|
| **PAH17** | ug/L | | |
| Acenaphthene | | 20* | **30** |
| Naphthalene | | 10* | **36** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **50900** |
| Manganese | | 300 | **1350** |
| Sodium | | 20000 | **402000** |
| **Total BTEX** | ug/L | -- | **3.41** |
| **Total CVOCs** | | -- | **2.39** |
| **Total PAHs** | | -- | **84.8** |

| Analyte | Units | Sample Name: GPEC-MW-6 Sample Date: 11/14/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **2520** |
| Sodium | | 20000 | **251000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW-101WT Sample Date: 11/12/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **401** |
| Selenium | | 10 | **30.9** |
| Sodium | | 20000 | **257000** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **38.7** |
| PFOA | | 6.7 | **13.7** |
| **Total BTEX** | ug/L | -- | **0.51** |
| **Total CVOCs** | | -- | **2.67** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **123.07** |

| Analyte | Units | Sample Name: GPEC-GT-10S (MW-17S) Sample Date: 11/13/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Arsenic | | 25 | **32.6** |
| Manganese | | 300 | **489** |
| Sodium | | 20000 | **241000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **1.1** |

| Analyte | Units | Sample Name: GPEC-MW219S Sample Date: 11/20/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **3380** |
| Sodium | | 20000 | **41100** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.1** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW514 Sample Date: 11/15/2024 NYS AWQS | |
|---|---|---|---|
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **100** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **105000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **103.3** |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW513S Sample Date: 11/15/2024 NYS AWQS | |
|---|---|---|---|
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **37.9** |
| PFOA | | 6.7 | **40.8** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **142000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.74** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **141.06** |

| Analyte | Units | Sample Name: GPEC-MW221S Sample Date: 11/12/2024 NYS AWQS | |
|---|---|---|---|
| **Other VOCs** | ug/L | | |
| Carbon disulfid | | 60* | **250** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **15.3** |
| PFOA | | 6.7 | **31.2** |
| **Dissolved Metals** | ug/L | | |
| Antimony | | 3 | **60.4** |
| Arsenic | | 25 | **46.2** |
| Iron | | 300 | **406** |
| Magnesium | | 35000* | **99300** |
| Selenium | | 10 | **25.7** |
| Sodium | | 20000 | **573000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.26** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **102.97** |

| Analyte | Units | Sample Name: GPEC-MW220S Sample Date: 11/13/2024 NYS AWQS | |
|---|---|---|---|
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **4.9** |
| PFOA | | 6.7 | **132** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **695** |
| Sodium | | 20000 | **839000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **212.69** |

| Analyte | Units | Sample Name: GPEC-MW339S Sample Date: 10/30/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **230** |
| Ethylbenzene | | 5 | **23** |
| **PAH17** | ug/L | | |
| Benzo(a)anthracene | | 0.002* | **3.4** |
| Benzo(b)fluoranthene | | 0.002* | **3.6** |
| Benzo(k)fluoranthene | | 0.002* | **1.5** |
| Benzo(a)pyrene | | ND | **3.8** |
| Chrysene | | 0.002* | **3.2** |
| Indeno(1,2,3-cd)pyrene | | 0.002* | **2.3** |
| Naphthalene | | 10* | **17** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **716** |
| Sodium | | 20000 | **31600** |
| **Total BTEX** | ug/L | -- | **281.06** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **71.1** |

| Analyte | Units | Sample Name: GPEC-MW904 Sample Date: 11/14/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **63600** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW344S Sample Date: 11/14/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **483** |
| Sodium | | 20000 | **21000** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **3.9** |
| PFOA | | 6.7 | **73** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **130.06** |

| Analyte | Units | Sample Name: GPEC-MW905 Sample Date: 11/21/2024 NYS AWQS | |
|---|---|---|---|
| Manganese | | 300 | **1130** |
| Sodium | | 20000 | **31000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-MW222S Sample Date: 11/5/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **13** |
| **Other VOCs** | ug/L | | |
| Isopropylbenzene | | 5 | **14** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **230** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **398** |
| Sodium | | 20000 | **40600** |
| **Total BTEX** | ug/L | -- | **18.85** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **270.8** |

| Analyte | Units | Sample Name: GPEC-GT-1S Sample Date: 11/6/2024 NYS AWQS | |
|---|---|---|---|
| **Dissolved Metals** | ug/L | | |
| Arsenic | | 25 | **80.2** |
| Iron | | 300 | **5750** |
| Lead | | 25 | **3270** |
| Manganese | | 300 | **434** |
| Sodium | | 20000 | **42600** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| Analyte | Units | Sample Name: GPEC-GT-3(MW-16) Sample Date: 11/11/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **62** |
| Ethylbenzene | | 5 | **1400** |
| Toluene | | 5 | **2100** |
| o-Xylene | | 5 | **1800** |
| m/p-Xylene | | 5 | **3500** |
| **Other VOCs** | ug/L | | |
| 1,2-Dichlorobenzene (o-DCB) | | 3 | **4.3 J** |
| Isopropylbenzene | | 5 | **15** |
| Styrene | | 5 | **2100** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **700** |
| **PAH17 Other SVOCs** | ug/L | | |
| 4-Methylphenol (p-Cresol) | | 1 | **4.1 J** |
| **Dissolved Metals** | ug/L | | |
| Arsenic | | 25 | **132** |
| Iron | | 300 | **1340** |
| Manganese | | 300 | **551** |
| Sodium | | 20000 | **44000** |
| **Total BTEX** | ug/L | -- | **8862** |
| **Total CVOCs** | | -- | **4.3** |
| **Total PAHs** | | -- | **707** |

| Analyte | Units | Sample Name: GPEC-GT-4S(MW-14S) Sample Date: 11/21/2024 Parent Sample | Duplicate: DUP-04 11/21/2024 GPEC-GT-4S(MW-14S) |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **41000** |
| Ethylbenzene | | 5 | **40000** |
| Naphthalene | ug/L | 10* | **11** |
| **PAH17 Other SVOCs** | ug/L | | |
| Phenol | | 1 | **290** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **10.5** |
| PFOA | | 6.7 | **89.3** |
| **Dissolved Metals** | ug/L | | |
| Barium | | 1000 | **1050** |
| Iron | | 300 | **313** |
| Magnesium | | 35000* | **132000** |
| Manganese | | 300 | **5270** |
| Sodium | | 20000 | **15800000** |
| **Total BTEX** | ug/L | -- | **41000** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **166.44** |

| Analyte | Units | Sample Name: GPEC-GT-5(MW-15) Sample Date: 11/11/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **71000** |
| Ethylbenzene | | 5 | **540** |
| m/p-Xylene | | 5 | **120 J** |
| **PAH17** | ug/L | | |
| Acenaphthene | | 20* | **53** |
| Naphthalene | | 10* | **4100** |
| **PAH17 Other SVOCs** | ug/L | | |
| Phenol | | 1 | **54** |
| **Dissolved Metals** | ug/L | | |
| Barium | | 1000 | **1300** |
| Iron | | 300 | **37700** |
| Magnesium | | 35000* | **108000** |
| Manganese | | 300 | **2180** |
| Lead | | 25 | **1.2 U** |
| Sodium | | 20000 | **2220000** |
| **Total BTEX** | ug/L | -- | **71660** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **4367.5** |

| Analyte | Units | Sample Name: W-1 Sample Date: 11/5/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **310** |
| Ethylbenzene | | 5 | **42** |
| Toluene | | 5 | **6.8** |
| o-Xylene | | 5 | **18** |
| m/p-Xylene | | 5 | **44** |
| **Other VOCs** | ug/L | | |
| Isopropylbenzene | | 5 | **6** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **120** |
| **PAH17 Other SVOCs** | ug/L | | |
| Phenol | | 1 | **2.2 J** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **982000** |
| **Total BTEX** | ug/L | -- | **420.8** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **139.6** |

| Analyte | Units | Sample Name: W-2 Sample Date: 11/5/2024 NYS AWQS | |
|---|---|---|---|
| **BTEX** | ug/L | | |
| Benzene | | 1 | **410** |
| Ethylbenzene | | 5 | **600** |
| Toluene | | 5 | **19** |
| o-Xylene | | 5 | **27** |
| m/p-Xylene | | 5 | **130** |
| **Other VOCs** | ug/L | | |
| Isopropylbenzene | | 5 | **55** |
| **PAH17** | ug/L | | |
| Acenaphthene | | 20* | **49** |
| Naphthalene | | 10* | **11000** |
| **PAH17 Other SVOCs** | ug/L | | |
| 4-Methylphenol (p-Cresol) | | 1 | **1.9 J** |
| Phenol | | 1 | **2.5 J** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **4140** |
| Manganese | | 300 | **707** |
| Sodium | | 20000 | **579000** |
| **Total BTEX** | ug/L | -- | **1186** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **11359.2** |

MW-2
PZ1
MW-3
GPEC-MW537
GPEC-MW538
GPE-MW1S
GPE-MW2S
GPE-MW3S
GPE-MW4S
GPEC-MW13
MW-4
MW-5
GPEC-MW505S
GPEC-MW217S
PZ2
GPEC-MW514
GPEC-MW219S
GPEC-MW513
GPEC-MW9
GPEC-MW220S
GPEC-MW12
GPEC-MW221S
GPEC-MW3WT
GPEC-MW339S
GPEC-MW2
GPEC-MW6
GPEC-RW304
GPEC-MW101WT
GPEC-MW904
GPEC-MW222S
GPEC-GT10S (MW)
GPEC-MW344S
GPEC-MW905
GPEC-RW332
GPEC-GT03 (MW)
GPEC-GT04S (MW)
GPEC-GT05 (MW)
W-1
W-2
GPEC-GT1S

AREA 6
AREA 8
AREA 2
AREA 9
AREA 7
AREA 3
AREA 5
AREA 4
AREA 1
AREA 4

NEWTOWN CREEK

***LEGEND***

- MONITORING WELL
- PIEZOMETER
- INVESTIGATION RECOVERY WELL
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1: AERIAL PHOTOGRAPH OBTAINED FROM GOOGLETM EARTH PRO (http://www.google.com/earth/), IMAGERY DATE: 6/17/2010.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

SHALLOW GROUNDWATER 2024/2025 ANALYTICAL SUMMARY

June 2026

Plate 16

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Shallow_Supp_GW_Data_250328.mxd

| | | Sample Name | GPEC-MW-328I |
|---|---|---|---|
| | | Sample Date | 11/25/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **768000** |
| Sodium | | 20000 | **6750000** |
| **Total BTEX** | ug/L | -- | **0.22** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-11 |
|---|---|---|---|
| | | Sample Date | 11/13/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **5.56** |
| PFOA | | 6.7 | **28.9** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **50700** |
| Manganese | | 300 | **1340** |
| Sodium | | 20000 | **411000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | 77.85 |

| | | Sample Name | GPEC-MW219I |
|---|---|---|---|
| | | Sample Date | 11/20/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **14** |
| PFOA | | 6.7 | **78.1** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **1080** |
| Sodium | | 20000 | **116000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **6.72** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **148.48** |

| | | Sample Name | GPEC-MW221I |
|---|---|---|---|
| | | Sample Date | 11/12/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **22** |
| Tetrachloroethene (PCE) | | 5 | **30** |
| Trichloroethene (TCE) | | 5 | **16** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **10.2** |
| PFOA | | 6.7 | **82.3** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **59400** |
| Manganese | | 300 | **2720** |
| Sodium | | 20000 | **148000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **71.75** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **147.04** |

| | | Sample Name | GPEC-MW513D |
|---|---|---|---|
| | | Sample Date | 11/15/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **110** |
| Trichloroethene (TCE) | | 5 | **89** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **1.44 J** |
| PFOA | | 6.7 | **8.77** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **4690** |
| Magnesium | | 35000* | **150000** |
| Manganese | | 300 | **12100** |
| Sodium | | 20000 | **766000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **781.3** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **11.77** |

| | | Sample Name | GPEC-MW220I |
|---|---|---|---|
| | | Sample Date | 11/13/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| Tetrachloroethene ( | | 5 | **7.7** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **41.6** |
| PFOA | | 6.7 | **61.7** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **132000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **12** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **251.94** |

| | | Sample Name | GPEC-MW339I |
|---|---|---|---|
| | | Sample Date | 10/30/2024 |
| | | Parent Sample | |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **23** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **3190** |
| Sodium | | 20000 | **96200** |
| **Total BTEX** | ug/L | -- | **0.27** |
| **Total CVOCs** | | -- | **33.52** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW344I |
|---|---|---|---|
| | | Sample Date | 11/14/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **160** |
| trans-1,2-Dichloroethene | | 5 | **15** |
| Tetrachloroethene (PCE) | | 5 | **330** |
| Trichloroethene (TCE) | | 5 | **130** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **27.4** |
| PFOA | | 6.7 | **80.2** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **48100** |
| Manganese | | 300 | **3120** |
| Sodium | | 20000 | **190000** |
| **Total BTEX** | ug/L | -- | **0.63** |
| **Total CVOCs** | | -- | **638.8** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **187.09** |

| | | Sample Name | GPEC-MW333I |
|---|---|---|---|
| | | Sample Date | 11/5/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **40** |
| Ethylbenzene | | 5 | **7.4** |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **150** |
| trans-1,2-Dichloroethene | | 5 | **15** |
| Trichloroethene (TCE) | | 5 | **46** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **71300** |
| Selenium | | 10 | **63.7** |
| Sodium | | 20000 | **485000** |
| **Total BTEX** | ug/L | -- | **47.4** |
| **Total CVOCs** | | -- | **214.5** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW332I |
|---|---|---|---|
| | | Sample Date | 11/7/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **601000** |
| Manganese | | 300 | **217** |
| Sodium | | 20000 | **7110000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-GT-1 (MW-18) |
|---|---|---|---|
| | | Sample Date | 11/6/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Barium | | 1000 | **1610** |
| Lead | | 25 | **96.8** |
| Magnesium | | 35000* | **739000** |
| Sodium | | 20000 | **6580000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-328I |
|---|---|---|---|
| | | Sample Date | 11/25/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **768000** |
| Sodium | | 20000 | **6750000** |
| **Total BTEX** | ug/L | -- | **0.22** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-GT-4D(MW-14D) |
|---|---|---|---|
| | | Sample Date | 11/21/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **12** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **7.23** |
| PFOA | | 6.7 | **91.7** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **46900** |
| Manganese | | 300 | **1120** |
| Sodium | | 20000 | **167000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **16.6** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **171.16** |

| | | Sample Name | GPEC-GT5I |
|---|---|---|---|
| | | Sample Date | 11/11/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **20** |
| **Other VOCs** | ug/L | | |
| Isopropylbenzene | | 5 | **5.2** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **11** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **1110** |
| Magnesium | | 35000* | **55100** |
| Manganese | | 300 | **1300** |
| Sodium | | 20000 | **645000** |
| **Total BTEX** | ug/L | -- | **23.37** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **21.7** |

| | | Sample Name | GPEC-MW306I |
|---|---|---|---|
| | | Sample Date | 11/5/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **720** |
| o-Xylene | | 5 | **7.9** |
| m/p-Xylene | | 5 | **7.1** |
| **Other VOCs** | ug/L | | |
| Isopropylbenzene | | 5 | **9.6** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **590** |
| **Other SVOCs** | ug/L | | |
| Phenol | | 1 | **7.5 J** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **2120** |
| Sodium | | 20000 | **596000** |
| **Total BTEX** | ug/L | -- | **741.6** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **630.2** |

| | | Sample Name | GPE-MW-1D |
|---|---|---|---|
| | | Sample Date | 11/19/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **5.69** |
| PFOA | | 6.7 | **21.4** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **2130 B** |
| Sodium | | 20000 | **104000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **2.45** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **52.75** |

| | | Sample Name | GPEC-MW-8 |
|---|---|---|---|
| | | Sample Date | 11/22/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **4980** |
| Sodium | | 20000 | **109000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.26** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPE-MW-2D | DUP-03 |
|---|---|---|---|---|
| | | Sample Date | 11/18/2024 | 11/18/2024 |
| | | Parent Sample | | GPE-MW-2D |
| Analyte | Units | NYS AWQS | | |
| **Dissolved Metals** | ug/L | | | |
| Arsenic | | 25 | **120** | **134** |
| Manganese | | 300 | **647 B** | **657 B** |
| Sodium | | 20000 | **142000** | **120000** |
| **Total BTEX** | ug/L | -- | ND | ND |
| **Total CVOCs** | | -- | **1.9** | **1.9** |
| **Total PAHs** | | -- | ND | ND |

| | | Sample Name | GPE-MW-3D |
|---|---|---|---|
| | | Sample Date | 11/18/2024 |
| | | Parent Sample | |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **97000** |
| Manganese | | 300 | **774 B** |
| Sodium | | 20000 | **658000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **1.1** |

| | | Sample Name | GPE-MW-4D |
|---|---|---|---|
| | | Sample Date | 11/18/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **171000** |
| **Total BTEX** | ug/L | -- | **0.87** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **4.7** |

| | | Sample Name | GPEC-MW-5S |
|---|---|---|---|
| | | Sample Date | 11/18/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **3.39** |
| PFOA | | 6.7 | **28.7** |
| **Dissolved Metals** | ug/L | | |
| Arsenic | | 25 | **34.8** |
| Magnesium | | 35000* | **87600** |
| Sodium | | 20000 | **524000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **0.72** |
| **Total PFAS** | ng/L | -- | **59.26** |

| | | Sample Name | GPEC-MW-4 |
|---|---|---|---|
| | | Sample Date | 1/14/2025 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **164000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.28** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW410 |
|---|---|---|---|
| | | Sample Date | 11/9/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **318000** |
| Sodium | | 20000 | **2890000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **3** |

| | | Sample Name | GPEC-MW-3S |
|---|---|---|---|
| | | Sample Date | 11/21/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **10.1** |
| PFOA | | 6.7 | **19.8** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **478** |
| Sodium | | 20000 | **181000** |
| **Total BTEX** | ug/L | -- | **0.3** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **2.2** |
| **Total PFAS** | ng/L | -- | **52.33** |

| | | Sample Name | GPEC-MW409 |
|---|---|---|---|
| | | Sample Date | 11/20/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **645000** |
| Manganese | | 300 | **586** |
| Sodium | | 20000 | **5780000** |
| **Total BTEX** | ug/L | -- | **1.03** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | **6.03** |

| | | Sample Name | GPEC-MW408 |
|---|---|---|---|
| | | Sample Date | 12/3/2024 |
| | | Parent Sample | |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **43600** |
| Manganese | | 300 | **780** |
| Sodium | | 20000 | **332000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.14** |
| **Total PAHs** | | -- | **2.8** |

| | | Sample Name | GPEC-MW405 |
|---|---|---|---|
| | | Sample Date | 11/4/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| Vinyl chloride | | 2 | **2.2** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **36100** |
| Manganese | | 300 | **1660** |
| Sodium | | 20000 | **275000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **6.5** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW404 |
|---|---|---|---|
| | | Sample Date | 11/4/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **2050** |
| Sodium | | 20000 | **170000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.85** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW103 | Dup-01 |
|---|---|---|---|---|
| | | Sample Date | 11/7/2024 | 11/7/2024 |
| | | Parent Sample | | GPEC-MW103 |
| Analyte | Units | NYS AWQS | | |
| **Dissolved Metals** | ug/L | | | |
| Manganese | | 300 | **2180** | **2070** |
| Sodium | | 20000 | **491000** | **705000** |
| **Total BTEX** | ug/L | -- | ND | ND |
| **Total CVOCs** | | -- | ND | **0.31** |
| **Total PAHs** | | -- | **5.7** | **5.8** |

| | | Sample Name | GPEC-MW403 |
|---|---|---|---|
| | | Sample Date | 11/4/2024 |
| | | Parent Sample | |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **548000** |
| Manganese | | 300 | **872** |
| Sodium | | 20000 | **4790000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.29** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-GT-7(MW-19) |
|---|---|---|---|
| | | Sample Date | 11/11/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **37500** |
| Manganese | | 300 | **1590** |
| Sodium | | 20000 | **435000** |
| **Total BTEX** | ug/L | -- | **0.25** |
| **Total CVOCs** | | -- | **3.37** |
| **Total PAHs** | | -- | **0.7** |

| | | Sample Name | GPEC-GT-10 (MW-17I) |
|---|---|---|---|
| | | Sample Date | 11/7/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **1100** |
| Sodium | | 20000 | **195000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **0.97** |
| **Total PAHs** | | -- | ND |

AREA 6
AREA 8
AREA 2
AREA 9
AREA 7
AREA 3
AREA 5
AREA 4
AREA 1
AREA 4
NEWTOWN CREEK

GPE-MW1D
GPE-MW2D
GPE-MW-3D
GPE-MW4D
GPEC-MW218I
GPEC-MW217I
GPEC-MW-5S
GPEC-MW219I
GPEC-MW513D
GPEC-MW-8
GPEC-MW-4
GPEC-MW220I
GPEC-MW-11
GPEC-MW410
GPEC-MW409
GPEC-MW408
GPEC-MW221I
GPEC-MW-10
GPEC-MW405
GPEC-MW339I
GPEC-RW304
GPEC-MW404
GPEC-MW403
GPEC-MW103
GPEC-MW344I
GPEC-MW333I
GPEC-MW332I
GPEC-RW332
GPEC-MW-328I
GPEC-GT01
GPEC GT04D (MW)
GPEC-GT5I
GPEC-MW306I
GPEC-GT07 (MW)
GPEC-GT10 (MW)

**LEGEND**

- MONITORING WELL
- PIEZOMETER
- INVESTIGATION RECOVERY WELL
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

**SOURCES:**
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

**NOTE:**
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

INTERMEDIATE GROUNDWATER 2024/2025 ANALYTICAL SUMMARY

June 2026

Plate 14

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Intermediate_Supp_GW_Data_250328.mxd

| | | Sample Name | MW-2D |
|---|---|---|---|
| | | Sample Date | 11/8/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **21** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **686** |
| Magnesium | | 35000* | **47900** |
| Manganese | | 300 | **330** |
| Sodium | | 20000 | **198000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **21** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW219D |
|---|---|---|---|
| | | Sample Date | 11/20/2024 |
| Analyte | Units | NYS AWQS | |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **5.16** |
| PFOA | | 6.7 | **42.6** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **1840** |
| Magnesium | | 35000* | **92500** |
| Manganese | | 300 | **6880** |
| Sodium | | 20000 | **543000** |
| **Total BTEX** | ug/L | -- | **0.59** |
| **Total CVOCs** | | -- | **1.45** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **83.67** |

| | | Sample Name | GPEC-MW401 |
|---|---|---|---|
| | | Sample Date | 10/29/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **33** |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **1910** |
| Magnesium | | 35000* | **97100** |
| Manganese | | 300 | **9140** |
| Sodium | | 20000 | **497000** |
| **Total BTEX** | ug/L | -- | 0.22 |
| **Total CVOCs** | | -- | **40.65** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW221D |
|---|---|---|---|
| | | Sample Date | 11/12/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.1** |
| cis-1,2-Dichloroethene | | 5 | **32** |
| Tetrachloroethene (PCE) | | 5 | **51** |
| Trichloroethene (TCE) | | 5 | **25** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **17** |
| PFOA | | 6.7 | **83.9** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **36900** |
| Manganese | | 300 | **3400** |
| Sodium | | 20000 | **124000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **112.97** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **164.2** |

| | | Sample Name | GPEC-MW220D |
|---|---|---|---|
| | | Sample Date | 11/13/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| Tetrachloroethene (PCE) | | 5 | **6.1** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **46.8** |
| PFOA | | 6.7 | **97.9** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **37900** |
| Manganese | | 300 | **9190** |
| Sodium | | 20000 | **163000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **10.08** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **266.18** |

| | | Sample Name | GPEC-MW339D |
|---|---|---|---|
| | | Sample Date | 10/30/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **1040** |
| Sodium | | 20000 | **316000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **2.07** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW344D |
|---|---|---|---|
| | | Sample Date | 11/14/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **9.5** |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.9** |
| cis-1,2-Dichloroethene | | 5 | **80** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **8.55** |
| PFOA | | 6.7 | **40** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **78900** |
| Manganese | | 300 | **3510** |
| Sodium | | 20000 | **389000** |
| **Total BTEX** | ug/L | -- | **11** |
| **Total CVOCs** | | -- | **111.42** |
| **Total PAHs** | | -- | **12.3** |
| **Total PFAS** | ng/L | -- | **78.79** |

| | | Sample Name | GPEC-MW-333D |
|---|---|---|---|
| | | Sample Date | 11/5/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **78** |
| Ethylbenzene | | 5 | **46** |
| Toluene | | 5 | **13** |
| o-Xylene | | 5 | **60** |
| m/p-Xylene | | 5 | **36** |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **620** |
| trans-1,2-Dichloroethene | | 5 | **57** |
| Isopropylbenzene | | 5 | **8.6** |
| Vinyl chloride | | 2 | **7.8** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **40100** |
| Manganese | | 300 | **483** |
| Sodium | | 20000 | **484000** |
| **Total BTEX** | ug/L | -- | **233** |
| **Total CVOCs** | | -- | **689.52** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW502 |
|---|---|---|---|
| | | Sample Date | 11/20/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **67** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **7.08** |
| PFOA | | 6.7 | **51.4** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **86700** |
| Manganese | | 300 | **681** |
| Sodium | | 20000 | **244000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **73.21** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **95.28** |

| | | Sample Name | GPEC-MW-11D |
|---|---|---|---|
| | | Sample Date | 11/13/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **5** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **8.39** |
| PFOA | | 6.7 | **16.7** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **100000** |
| Manganese | | 300 | **1820** |
| Sodium | | 20000 | **472000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **5.39** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **93.41** |

| | | Sample Name | GPEC-MW217D |
|---|---|---|---|
| | | Sample Date | 11/19/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.4** |
| Tetrachloroethene (PCE) | | 5 | **9.6** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **3.81** |
| PFOA | | 6.7 | **64** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **65800** |
| Sodium | | 20000 | **160000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **13.15** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **185.76** |

| | | Sample Name | GPEC-MW402 |
|---|---|---|---|
| | | Sample Date | 11/1/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **18** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **114000** |
| Manganese | | 300 | **2630** |
| Sodium | | 20000 | **204000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **18.61** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPE-MW2D2 |
|---|---|---|---|
| | | Sample Date | 11/25/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **1.5** |
| Toluene | | 5 | **13** |
| **Dissolved Metals** | ug/L | | |
| Sodium | | 20000 | **302000** |
| **Total BTEX** | ug/L | -- | **14.5** |
| **Total CVOCs** | | -- | **1.38** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-5D | GPEC-MW5D2 |
|---|---|---|---|---|
| | | Sample Date | 11/18/2024 | 11/25/2024 |
| Analyte | Units | NYS AWQS | | |
| **BTEX** | ug/L | | | |
| Benzene | | 1 | **1.7** | **0.75 J** |
| **PAH17 Other SVOCs** | ug/L | | | |
| Phenol | | 1 | 10 U | **1.5 J** |
| **Dissolved Metals** | ug/L | | | |
| Manganese | | 300 | **524 B** | **90.1** |
| Sodium | | 20000 | **220000** | **276000** |
| **PFAS** | ng/L | | | |
| PFOS | | 2.7 | **7.17** | -- |
| PFOA | | 6.7 | **30.6** | -- |
| **Total BTEX** | ug/L | -- | **2.03** | **0.75** |
| **Total CVOCs** | | -- | ND | **0.56** |
| **Total PAHs** | | -- | 24.5 | **ND** |
| **Total PFAS** | ng/L | -- | **182.66** | -- |

| | | Sample Name | GPEC-MW-4D |
|---|---|---|---|
| | | Sample Date | 1/14/2025 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **12** |
| Tetrachloroethene | | 5 | **43** |
| Trichlorothene | | 5 | **29** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **64700** |
| Manganese | | 300 | **1670** |
| Sodium | | 20000 | **567000** |
| **Total BTEX** | ug/L | -- | **0.36** |
| **Total CVOCs** | | -- | **75.28** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW407 |
|---|---|---|---|
| | | Sample Date | 11/14/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Ethylbenzene | | 5 | **13** |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.7** |
| cis-1,2-Dichloroethene | | 5 | **9.4** |
| **PAH17** | ug/L | | |
| Naphthalene | | 10* | **32** |
| **Dissolved Metals** | ug/L | | |
| Arsenic | | 25 | **28.3** |
| Manganese | | 300 | **1410** |
| Sodium | | 20000 | **237000** |
| **Total BTEX** | ug/L | -- | **20** |
| **Total CVOCs** | | -- | **15.54** |
| **Total PAHs** | | -- | **52.7** |

| | | Sample Name | GPEC-MW406 |
|---|---|---|---|
| | | Sample Date | 11/8/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.3** |
| cis-1,2-Dichloroethene | | 5 | **5.3** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **1040** |
| Sodium | | 20000 | **189000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **14.39** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-2D |
|---|---|---|---|
| | | Sample Date | 11/13/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Ethylbenzene | | 5 | **12** |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.2** |
| **PAH17** | ug/L | | |
| Acenaphthene | | 20* | **31** |
| Naphthalene | | 10* | **81** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **851** |
| Sodium | | 20000 | **119000** |
| **Total BTEX** | ug/L | -- | **22.9** |
| **Total CVOCs** | | -- | **3.82** |
| **Total PAHs** | | -- | **121.3** |

| | | Sample Name | GPEC-MW1D |
|---|---|---|---|
| | | Sample Date | 1/7/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 5 | **11** |
| cis-1,2-Dichloroethene | | 5 | **17** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **2750** |
| Sodium | | 20000 | **231000** |
| **PFAS** | ng/L | | |
| PFOS | | 2.7 | **5.69** |
| PFOA | | 6.7 | **21.4** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **31.76** |
| **Total PAHs** | | -- | ND |
| **Total PFAS** | ng/L | -- | **52.75** |

| | | Sample Name | GPEC-MW-101I | GPEC-MW-101D | DUP-02 |
|---|---|---|---|---|---|
| | | Sample Date | 11/12/2024 | 11/12/2024 | 11/12/2024 |
| | | Parent Sample | | | GPEC-MW-101D |
| Analyte | Units | NYS AWQS | | | |
| **Other VOCs** | ug/L | | | | |
| 1,2-Dichloroethane | | 0.6 | **0.94 J** | 1 U | 1 U |
| **Dissolved Metals** | ug/L | | | | |
| Magnesium | | 35000* | **62000** | **243000** | **243000** |
| Manganese | | 300 | **2490** | **738** | **868** |
| Sodium | | 20000 | **466000** | **2600000** | **2560000** |
| **PFAS** | ng/L | | | | |
| PFOS | | 2.7 | **10.5** | **0.93 J** | **0.9 J** |
| PFOA | | 6.7 | **33.4** | **10.9** | **10.8** |
| **Total BTEX** | ug/L | -- | ND | ND | ND |
| **Total CVOCs** | | -- | **2.67** | ND | ND |
| **Total PAHs** | | -- | ND | ND | ND |
| **Total PFAS** | ng/L | -- | **105.93** | **23.39** | **23.58** |

| | | Sample Name | GPEC-MW222D |
|---|---|---|---|
| | | Sample Date | 11/5/2024 |
| Analyte | Units | NYS AWQS | |
| **BTEX** | ug/L | | |
| Benzene | | 1 | **4** |
| **Other VOCs** | ug/L | | |
| cis-1,2-Dichloroethene | | 5 | **6.3** |
| trans-1,2-Dichloroethene | | 5 | **11** |
| MTBE | | 10* | **19** |
| Vinyl chloride | | 2 | **26** |
| **Dissolved Metals** | ug/L | | |
| Manganese | | 300 | **323** |
| Sodium | | 20000 | **174000** |
| **Total BTEX** | ug/L | -- | **4** |
| **Total CVOCs** | | -- | **43.3** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-328D |
|---|---|---|---|
| | | Sample Date | 11/25/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.9** |
| cis-1,2-Dichloroethene | | 5 | **130** |
| trans-1,2-Dichloroethene | | 5 | **12** |
| Methyl tert-butyl ether (MTBE) | | 10* | **25** |
| Tetrachloroethene (PCE) | | 5 | **45** |
| Trichloroethene (TCE) | | 5 | **19** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **38400** |
| Manganese | | 300 | **967** |
| Sodium | | 20000 | **263000** |
| **Total BTEX** | ug/L | -- | **0.22** |
| **Total CVOCs** | | -- | **209.13** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-GT5D |
|---|---|---|---|
| | | Sample Date | 11/11/2024 |
| Analyte | Units | NYS AWQS | |
| **Dissolved Metals** | ug/L | | |
| Iron | | 300 | **1180** |
| Manganese | | 300 | **389** |
| Sodium | | 20000 | **268000** |
| **Total BTEX** | ug/L | -- | **0.24** |
| **Total CVOCs** | | -- | ND |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW306D |
|---|---|---|---|
| | | Sample Date | 11/21/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **1.1** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **53700** |
| Manganese | | 300 | **1710** |
| Sodium | | 20000 | **225000** |
| **Total BTEX** | ug/L | -- | ND |
| **Total CVOCs** | | -- | **1.36** |
| **Total PAHs** | | -- | ND |

| | | Sample Name | GPEC-MW-102D |
|---|---|---|---|
| | | Sample Date | 11/11/2024 |
| Analyte | Units | NYS AWQS | |
| **Other VOCs** | ug/L | | |
| 1,2-Dichloroethane | | 0.6 | **2.9** |
| **Dissolved Metals** | ug/L | | |
| Magnesium | | 35000* | **128000** |
| Manganese | | 300 | **2850** |
| Sodium | | 20000 | **332000** |
| **Total BTEX** | ug/L | -- | **0.29** |
| **Total CVOCs** | | -- | **6.51** |
| **Total PAHs** | | -- | ND |

AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
AREA 6
AREA 7
AREA 8
AREA 9
NEWTOWN CREEK
GPEC-MW502
MW-2D
GPEC-MW505D
GPEC-MW219D
GPEC-MW401
GPEC-MW220D
GPEC-MW221D
GPEC-MW339D
GPEC-MW344D
GPEC-MW333D
GPEC-MW222D
GPEC-MW328D
GPEC-GT5D
GPEC-MW306D
GPEC-MW102D
GPEC-MW11D
GPEC-MW402
GPEC-MW217D
GPEC-MW5D2
GPE-MW2D2
GPEC-MW407
GPEC-MW406
GPEC-MW2D
GPEC-MW101D
GPEC-MW101I
GPEC-MW1D

***LEGEND***

- MONITORING WELL
- PIEZOMETER
- EXCEEDANCE OF AT LEAST ONE AGWQS (BTEX, CVOCs OR PAHs)
- BTEX ISO CONCENTRATION LINE > 100 ug/L
- CVOC ISO CONCENTRATION LINE > 100 ug/L
- PAH ISO CONCENTRATION LINE > 100 ug/L
- PHASE 1 INVESTIGATION
- PHASE 2 INVESTIGATION
- PHASE 3 INVESTIGATION
- SITE BOUNDARY

***SOURCES:***
1. AERIAL PHOTOGRAPH OBTAINED FROM ESRI WORLD IMAGERY.

***NOTE:***
ANALYTICAL SUMMARIES ARE ONLY INCLUDED FOR THOSE LOCATIONS WITH AN EXCEEDANCE OF THE AGWQS FOR ANY INDIVIDUAL BTEX, PAH, OR CVOC COMPOUND

0 70 140 280
SCALE: 1" = 140'

Remedial Investigation Report
Greenpoint Energy Center
Former Manufactured Gas Plant Site
Brooklyn, New York

nationalgrid

PROJECT 125180

GEI Consultants

DEEP GROUNDWATER
2024/2025 ANALYTICAL
SUMMARY

June 2026 Plate 18

B:\Working\NATIONAL GRID\125180 NG-Greenpoint RI\05_GIS\Greenpoint\Phase_3_RI\Groundwater Analytical Deep_Supp_GW_Data_250328.mxd