REMEDIAL INVESTIGATION REPORT FOR THE FORMER HUNTS POINT GAS WORKS MARINE TRANSFER STATION (MTS) PARCEL SITE #V00554

Bronx, New York

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"I, Shane Blauvelt, certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications."

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TABLE OF CONTENTS

Page
SECTION 1 INTRODUCTION1-1
1.1 SITE CHARACTERIZATION STUDY OBJECTIVES1-1
1.2 REPORT ORGANIZATION1-1
SECTION 2 SITE BACKGROUND2-1
2.1 SITE OVERVIEW2-1
2.2 ADJOINING PROPERTY DESCRIPTION2-1
2.3 SITE HISTORY2-1
2.4 TOPOGRAPHY, REGIONAL GEOLOGY, AND HYDROGEOLOGY 2-1
SECTION 3 SITE CHARACTERIZATION ACTIVITIES3-1
3.1 SITE INSPECTION AND PRELIMINARY INVESTIGATION ACTIVITIES3-
3.2 UTILITY CLEARANCE
3.3 SOIL BORING INSTALLATION
3.4 MONITORING WELL INSTALLATION/DEVELOPMENT 3-2
3.5 SURVEYING
3.6 GROUNDWATER SAMPLING
3.7 MANAGEMENT OF INVESTIGATION-DERIVED WASTE
3.8 DATA VALIDATION AND REPORTING
SECTION 4 SITE CHARACTERIZATION RESULTS4-1
4.1 SITE GEOLOGY4-1
4.2 FORMER GAS WORKS STRUCTURES4-1
4.3 SITE HYDROGEOLOGY4-1

TABLE OF CONTENTS (CONTINUED)

		Page
4.4 \$	SOIL SAMPLE RESULTS	4-1
4.5	GROUNDWATER SAMPLE RESULTS	4-2
SECTIO	N 5 EXPOSURE ASSESSMENT	5-1
SECTIO	ON 6 CONCLUSIONS AND RECOMMENDATIONS	6-1
SECTIO	N 7 REFERENCES	7-1
	LIST OF TABLES	
Table 1	Sample Summary	
Table 2	Summary of Groundwater Elevations	
Table 3	Summary of Soil Analytical Data	
Table 4	Summary of Groundwater Analytical Data	
	LIST OF FIGURES	
Figure 1	Site Vicinity Map	
Figure 2	Site Location Map	
Figure 3	Sample Location Map	
Figure 4	Summary of VOCs, SVOCs, and PBCs in Subsurface Soil	
Figure 5	Summary of Metals in Subsurface Soil	
Figure 6	Summary of VOCs, SVOCs, PCBs and Metals in Groundwater	
Figure 7	Cross-Sections	

TABLE OF CONTENTS (CONTINUED)

LIST OF APPENDICES

APPENDIX A	SOIL	BORING	AND	MONITO	DRING	WELL	LC)GS

APPENDIX B GROUNDWATER SAMPLING LOGS

APPENDIX C DATA USABILITY SUMMARY REPORT

INTRODUCTION

1.1 SITE CHARACTERIZATION STUDY OBJECTIVES

Site characterization of the Hunts Points Marine Transfer Station (MTS) was conducted to (1) assess the potential presence of Manufactured Gas Plant (MGP) related impacts; and (2) to ascertain the potential need for further investigation or remediation. This Remedial Investigation Report (RIR) documents the field investigation activities and results associated with the Site Characterization at the Hunts Point New York City Department of Sanitation (NYCDOS) MTS Site. The specific objectives of this RIR are to assess whether hazardous substances have been released to the environment and may be present onsite, if they have migrated offsite, and whether they may have impacted human health or the environment. If no potential impacts are verified, a "no further action" conclusion may be warranted. If potential impacts are verified, additional sampling may be needed to determine the nature and extent of those impacts, or the need for remediation and interim measures to address the impacts. These objectives are consistent with those of the New York State Department of Environmental Conservation's (NYSDEC) comprehensive remedial investigation process, specifically Chapter 3 of the NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC, 2010).

1.2 REPORT ORGANIZATION

The Site Characterization was conducted by Parsons in September and October 2014. The field investigation activities are documented in this RIR in the following sections and appendices:

- Section 1: Introduction
- Section 2: Site Background
- Section 3: Site Characterization Activities
- Section 4: Site Characterization Results
- Section 5: Exposure Assessment
- Section 6: Conclusions and Recommendations
- Section 7: References
- Appendix A: Soil Boring and Monitoring Well Logs
- Appendix B: Groundwater Sampling Logs
- Appendix C: Data Usability Summary Report

SITE BACKGROUND

2.1 SITE OVERVIEW

Consolidated Edison Company of New York, Inc. (Con Edison) has entered into a Voluntary Cleanup Agreement (VCA) with the NYSDEC to investigate, and if necessary, remediate the former Hunts Point Gas Works (Site #V00554), located in a industrial area of the Bronx, New York (Figure 1). The former Hunts Point Gas Works was a MGP operated by Con Edison between 1926 and 1962. Currently, the former Hunts Point Gas Works property is owned by the City of New York for use as the Hunts Point Food Distribution Center. The portion of the former Hunts Point Gas Works property associated with this Site Characterization includes an approximately 4-acre area currently occupied by a New York City Department of Sanitation MTS between Parcels B and C (Figure 2), also known as Hunts Point MGP OU-6 (the Site).

2.2 ADJOINING PROPERTY DESCRIPTION

The Site is bound by Farragut Street to the north and northeast, beyond which is the Sultana Citarella site. The Site is bound by the Fulton Fish Market (Parcel B) on the north and northwest and the convergence of the Bronx and East Rivers to the south. The adjacent properties are currently owned by the City of New York and are managed by the New York City Economic Development Corporation (NYCEDC).

2.3 SITE HISTORY

Research for the entire Hunts Point Gas Works property was previously conducted and documented in the *Hunts Point Offsite Manufactured Gas Plant Site History Report, Bronx, New York* (Parsons, 2003). Based on this report, the gas works was owned and/or operated as an MGP and gas holder station by Con Edison between 1926 and 1962. The City of New York acquired the majority of the former Hunts Point Gas Works property in the late 1960s. The majority of the gas works property was then transitioned into warehouse space for a wholesale food cooperative.

Reviews of historical aerial photographs indicate that the majority of the structures related to the former gas works were located north of the Site in the area currently occupied by the Hunts Point Co-Operative Market.

Aerial photographs indicate that most of the Site was open water, until sometime between 1954 and 1966, when this area was filled in and the MTS was constructed. Aerial photographs indicate that the MTS has been present since at least 1966. Prior to the Site Characterization, no known investigation activities have been performed on the Site.

2.4 TOPOGRAPHY, REGIONAL GEOLOGY, AND HYDROGEOLOGY

Hunts Point is a peninsula on the East River and Bronx River that is surrounded by brackish or salty tidal water. The former Hunts Point Gas Works covers an area of approximately 182 acres on Hunts Point. The Site is on the southern boundary of the former Hunts Point Gas Works operations and covers approximately 4 acres.

The specific geology and subsurface conditions on and around the former Hunts Point Gas Works can vary depending on the local history and the specific activities conducted (construction, excavation, filling, etc.). Prior to significant construction and development, Hunts Point was drained by small creeks, which emptied into the Bronx and East rivers. Most of these creeks are now filled in and are covered by buildings and streets. However, the filled in channels and associated sedimentary deposits may have some influence on the occurrence and movement of shallow groundwater. The presence of sewer lines and abandoned piping may also contribute to the behavior of shallow groundwater. Groundwater in the area has been reported to occur within the shallow subsurface, and flows in a southerly direction toward the Hunts Point promontory, and the confluence of the Bronx and East Rivers (Hygienetics, 1997).

Shallow groundwater was encountered within the fill materials on the eastern portion of the former Hunts Point Gas works at depths between 2 and 5 feet (ft) below ground surface (bgs). This shallow water was not encountered at drilling locations on the western half of the former Hunts Point Gas works and there appears to be perched water within the fill and sand materials above the clay (Parsons, 2003). A deeper water-bearing zone was encountered during the subsurface investigation within a deeper sand layer at approximately 12 to 15 ft bgs within borings performed at the western half of the former Hunts Point Gas Works. Boring logs from the Hygienetics reports indicate the presence of groundwater from 3 to 9 ft bgs depending on the proximity to the Bronx River (Hygienetics, 1997 and LMS, 1999a and b). Investigation activities on Parcel B indicated the presence of either bedrock and/or boulders at depths ranging from as shallow as 6 ft bgs in test trenches, to depths of 40 ft bgs in deep soil borings (LMS, 2001).

SITE CHARACTERIZATION ACTIVITIES

The following sections describe the field investigation activities conducted as part of the Site Characterization. Parsons personnel mobilized to the Site on September 23, 2014 and the field investigation activities were conducted in September and October 2014 in accordance with the NYSDEC approved *Site Characterization Work Plan* (SCWP) (Parsons, 2011). The scope of field investigation activities included the installation of soil borings and monitoring wells. Soil and groundwater samples were collected for laboratory analysis. During all intrusive activities, a Community Air Monitoring Plan (CAMP) was implemented in accordance with the approved work plan. Sample locations are shown on Figure 3. Table 1 provides a summary of the samples and analyses.

3.1 SITE INSPECTION AND PRELIMINARY INVESTIGATION ACTIVITIES

On September 23, 2014, a Site inspection was conducted to refine the locations of the proposed investigation points. The proposed scope of work was reviewed with Con Edison. Proposed locations and proposed methods were altered in the field, as necessary, based on Site conditions, access, utilities, and safety. Sampling location changes were made in consultation with Con Edison and the NYSDEC.

3.2 UTILITY CLEARANCE

A geophysical survey was conducted to identify potential/possible underground conduits/ utilities in the area of the proposed soil boring and monitoring well locations. The geophysical survey was completed by Diversified Geophysics Inc. (DGI), of Mineola, New York prior to start of Site work.

Once the initial geophysical survey was completed, utility clearance keyhole test pits were hand or vacuum excavated at each proposed soil boring and monitoring well location for subsurface utilities. Utility clearance test pits were completed by Aquifer Drilling & Testing, Inc. (ADT) of Mineola, New York in September and October 2014. The typical utility clearance test pit excavation consisted of saw-cutting and jack-hammering the surface pavement (as necessary), and excavating using a Vactron, an air knife, and hand tools (as necessary) to a minimum depth of 5 ft bgs. During these excavation activities, soils were screened for VOCs using a photoionization detector (PID), their physical characteristics (e.g., soil type, grain size, color, etc.) were described, and notes of any evidence of physical impacts observed (staining, odor, sheen, non-aqueous phase liquid (NAPL), etc.) were recorded. When a utility clearance test pit could not be completed to a depth of 5 ft bgs due to the presence of underground utilities or subsurface obstructions, the location was moved approximately 5 to 10 ft away from the original location and re-excavated. Following completion of the utility clearance test pits, each test pit was backfilled prior to drilling or excavation.

3.3 SOIL BORING INSTALLATION

A total of three (3) soil borings (SB-01 through SB-03) were advanced during the Site Characterization activities to characterize subsurface conditions. The soil borings were

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completed in October 2014. Advancement of the soil borings was conducted by ADT under the supervision of a Parsons geologist. Soil borings were completed to depths ranging from approximately 21 to 43 ft bgs, depending on observed impacts and refusals. Figure 3 depicts the soil boring locations and corresponding boring logs are presented in Appendix A.

Soil borings were advanced using a Hollow Stem Auger (HSA) rig. Soil samples were collected continuously to the bottom of the boring. Each sample was screened for the presence of VOCs using a PID. Soil was also logged for physical characteristics of each sample (e.g., soil type, color, texture, moisture content, etc.), along with physical evidence of any impacted material (e.g., oil-like or tar-like NAPL, staining, sheens, odors, etc).

Soil samples were submitted to Chemtech and analyzed for TCL VOCs, TCL SVOCs, cyanide, TAL metals, and PCBs. A summary of the soil samples collected and analyses performed is provided in Table 1. Soil samples were collected from selected zones within the borings and were submitted for laboratory analysis based on the following criteria:

- One sample was collected from the zone with the highest PID readings or visual impacts. If visual impacts or elevated PID readings were not observed, a sample was collected from the upper portion of the boring or directly above the water table (if present).
- One sample was collected below the impacted zone (if present) or near the base of the boring to identify the vertical extent of any impacts at the location.

Upon completion, the boring locations were grouted with Portland cement and bentonite grout using a tremie pipe. Drilling equipment was decontaminated between each boring. Drill cuttings and decontamination water were containerized in 55-gallon steel drums and handled as described in Section 3.7.

3.4 MONITORING WELL INSTALLATION/DEVELOPMENT

A total of four (4) monitoring wells (MW-1 through MW-4) were installed during the Site Characterization activities. Monitoring wells were installed in October 2014 utilizing 4.25-inch outside diameter hollow stem augers and a truck-mounted drill rig. The monitoring well borings were advanced to varying depths, ranging from 25 to 51 ft bgs. The monitoring well screens were set at depths ranging from 5 to 23 ft bgs with the top of the screen approximately 2 ft above the observed groundwater table. Soil samples were collected from monitoring well borings on a continuous basis and were screened for the presence of VOCs using a PID. Soil samples were selected for analysis as described above (Section 3.3). Monitoring well boring and construction logs are provided in Appendix A.

The monitoring wells were constructed with 2-inch inner diameter, threaded, flush-joint, PVC casing and 10-foot lengths of 0.02-inch slot screen. The annular space around each well screen was backfilled with a No. 2 sand filter pack extending from the bottom of the well to at least 2 ft above the top of the screen. The annular space around the well riser was sealed with at least 2 ft of hydrated bentonite pellets on top of the sand pack. The remainder of the boring was backfilled with cement-bentonite grout to approximately 4 to 5 ft bgs. Each monitoring well was finished with a locking, flush-mount box set in concrete.

Monitoring well development was conducted in October 2014 a minimum of 24 hours after installation. Monitoring wells were developed until reasonably free of sediment (less than 50 NTU if possible) or until the pH, temperature, Oxygen Reduction Potential (ORP), and conductivity stabilized. Monitoring well development was monitored approximately every 5 minutes by reviewing water quality indicator measurements. Well development continued until turbidity was less than 50 nephelometric turbidity units (NTUs) for three successive readings or until water quality indicators stabilized, whichever occurred first in each monitoring well. The stabilization criteria were based on water quality indicators of three successive readings within 10%. During development, MW-2 ran dry several times and was not able to be developed to 50 NTUs. Therefore, the stabilization criteria were utilized.

Non-disposable drilling equipment was decontaminated between monitoring well locations. Monitoring well drill cuttings, well development water, and decontamination water were containerized in 55-gallon steel drums and handled as described in Section 3.7.

3.5 SURVEYING

At the conclusion of drilling activities, Chazen Engineering, Land Surveying and Landscape Architecture Co., D.P.C., a licensed New York state land surveyor, mobilized to the Site and identified the horizontal and vertical location of each new soil boring and monitoring well. Additionally, the survey included locating Site features such as manholes, bollards, hydrants, telephone poles, and more. Two elevation measurements were taken at each well location to identify the top of the PVC casing and the grade elevation. The survey elevations were measured to an accuracy of 0.01 ft above the National Geodetic Vertical Datum of 1988 (NGVD 1988).

3.6 GROUNDWATER SAMPLING

On October 30 and 31, 2014, groundwater samples were collected from the four (4) monitoring wells (MW-1 through MW-4). Prior to collecting samples, the depth to groundwater and thickness of any free product (if present) was measured in the monitoring wells using an electronic oil/water interface probe attached to a measuring tape accurate to 0.01 ft. Table 2 provides a summary of the groundwater level measurements and elevations.

Prior to purging, the headspace within each well was measured with a PID. Each well was purged using a submersible pump and low-flow purging techniques to stabilize the following water quality parameters: temperature, conductivity, pH, dissolved oxygen, oxidation reduction potential (ORP), and turbidity; which were measured approximately every five minutes.

Once stabilization was achieved, groundwater samples were collected using a low-flow submersible pump with dedicated tubing. Water quality parameter measurements and observations recorded during sampling activities are documented on the groundwater sampling records provided in Appendix B. Laboratory analysis of groundwater samples were conducted by Chemtech, an NYSDOH approved ELAP laboratory certified for analyses using Analytical Services Protocol (ASP). Groundwater samples were analyzed for TCL VOCs, TCL SVOCs, TAL Metals, PCBs, and total cyanide. Monitoring well MW-2 remained turbid throughout the sampling process, and was therefore analyzed for dissolved metals in addition to the aforementioned analyses. Non-dedicated sampling equipment (e.g., oil/water interface probe,

submersible pump) was decontaminated between sampling locations. Decontamination water was placed in 55-gallon drums and handled as described in Section 3.7.

3.7 MANAGEMENT OF INVESTIGATION-DERIVED WASTE

Investigation-derived waste (IDW), which included decontamination wash and rinse water, soil cuttings, purge water, debris, and used personal protective equipment (PPE), was containerized in Department of Transportation (DOT)-approved 55-gallon drums. The drums were sealed at the end of each work day and labeled with the date, the well or boring number(s), and the type of waste (e.g., drill cuttings, purge water). Parsons collected representative waste characterization samples of the IDW and coordinated transportation and disposal. Clean Earth of North Jersey, Inc. from Kearny, New Jersey disposed of the IDW at an offsite Con Edison-approved location in accordance with applicable local, state, and federal regulations.

3.8 DATA VALIDATION AND REPORTING

Data validation was performed in accordance with the USEPA Region II standard operating procedures (SOPs) for organic and inorganic data review which were in effect at the time of data validation (USEPA 2006; 2008a; 2008b). These validation guidelines are regional modifications to the National Functional Guidelines for organic and inorganic data review (USEPA, 1999 and 2004). Validation included the following:

- Verification of 100% of all quality control (QC) sample results (both qualitative and quantitative);
- Verification of the identification of 100% of all sample results (both positive hits and non-detects);
- Recalculation of 10% of all investigative sample results; and
- Preparation of a Data Usability Summary Report (DUSR).

The quality of the data has been assessed and is documented in the DUSR provided in Appendix C. In summary, the results of the data usability assessment show that the collected analytical data for soil and groundwater are valid for the intended purposes of the Site Characterization.

SITE CHARACTERIZATION RESULTS

This section presents the results of the Site Characterization. Analytical results for the soil and groundwater samples collected during the Site Characterization have been summarized in Tables 3 and 4 and on Figures 4, 5, and 6.

4.1 SITE GEOLOGY

The geology encountered in the soil borings during the Site Characterization is summarized in the logs provided in Appendix A. The boring logs show that the upper 8 to 32 ft contained fill materials (generally sand, gravel and cobble with trace amounts of brick, concrete, wood and silt). Parent material deposits of fine to coarse-grained sand, sand and gravel, and clay were encountered underlying fill material. Clay encountered at the base of soil borings ranged in thickness from approximately 3 to 4 ft. Soil borings were not advanced through the entirety of clay layer, therefore a total thickness was not observed. Bedrock was not encountered during the Site Characterization activities. Soil boring logs generated during the Site Characterization were used to develop the representative cross sections A to A' and B to B' shown on Figure 7.

4.2 FORMER GAS WORKS STRUCTURES

Remnants of former gas works structures were not encountered within any soil boring or monitoring well installed during the Site Characterization.

4.3 SITE HYDROGEOLOGY

The depth to groundwater was gauged in the four monitoring wells (MW-1 through MW-4) on October 30, 2014. Groundwater was encountered at 7.65 ft to 10.80 ft bgs and at elevations ranging from 1.60 ft AMSL at MW-3 to 2.66 ft AMSL at MW-4. Groundwater levels and corresponding elevations are summarized in Table 2. Water table elevations observed within monitoring wells, as well as observations from previous studies (Hygienetics, 1997) suggests that the groundwater flow direction is toward the Hunts Point promontory, and the confluence of the Bronx and East Rivers.

4.4 SOIL SAMPLE RESULTS

A total of 15 soil samples, were collected from the soil borings and monitoring well borings as part of the Site Characterization. Soil samples were submitted to Chemtech Laboratories and analyzed for TCL VOCs, TCL SVOCs, TAL metals, PCBs and cyanide as described in Section 3. The analytical results of the soil samples are summarized in Table 3 and presented on Figures 4 and 5. The soil sample results have been compared to both the Unrestricted Soil Cleanup Objectives (USCOs) and the Industrial Soil Cleanup Objectives (ISCOs) provided by NYSDEC in 6 NYCRR Part 375 (NYSDEC, 2006). The USCOs assume there are no imposed restrictions on the use of the Site. However, the Hunts Point MTS Site is zoned for manufacturing (i.e., industrial) purposes, a majority of the Site is paved, and public access to the Site is restricted by fences. Therefore, a comparison of soil sample results to USCOs is

conservative, and ISCOs were utilized as an alternative comparison. PID readings, visual observation, and analytical results from the subsurface soil investigation are summarized below.

PID Readings/NAPL Results

PID readings for soil samples collected during soil boring/monitoring well installations ranged from 0.0 to 1.7 ppm above background. The highest PID reading of 1.7 ppm was observed in soil boring MW-4 at a depth interval of 44 to 46 ft bgs. Non-aqueous-phase-liquid (NAPL) was not observed in the process of soil boring/monitoring well installation during the Site Characterization activities.

VOCs

Ten (10) individual VOCs were detected at least once in the soil samples collected during the Site Characterization. Of these, only one (1) VOC (acetone) was detected at concentrations exceeding the USCOs. Acetone, a common laboratory contaminant, was detected in two soil samples [SB-2 (39-41 ft) and MW-3 (29-31 ft)] above USCOs. However, acetone concentrations were below ISCOs. Total VOC concentrations in all soil samples ranged from 0.01 to 0.28 milligrams/kilogram (mg/kg), with the maximum concentration being detected in soil collected from SB-2, at a depth of 39 to 41 ft bgs.

SVOCs

Twenty (20) individual SVOCs were detected in soil samples collected during the Site Characterization. Five (5) PAHs [benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-C,D)pyrene] were detected at concentrations exceeding their respective USCOs in one soil sample [SB-2 (39-41)]. Only one of these PAHs, benzo(a)pyrene, exceeded its respective ISCO. Total SVOC concentrations in all soil samples ranged from 0.35 to 28.88 mg/kg, with the maximum concentration being detected in soil collected from SB-2, at a depth of 39 to 41 ft bgs. SB-2 was the only soil boring in which SVOC concentrations were detected above USCOs.

PCBs

One (1) PCB, Arocolor 1260, was detected in MW-1 (7-9 ft bgs) at a concentration of 0.088 mg/kg, which is below its USCO. PCBs were not detected in any other soil samples.

Inorganics

A total of twenty two (22) inorganic constituents were detected in soil samples collected during the Site Characterization. Of these, eight (8) metals exceeded their respective USCOs (arsenic, chromium, copper, lead, mercury, nickel, silver, and zinc). The materials most impacted by inorganics are found in SB-2, at a depth of 39-41 ft bgs. Only one (1) inorganic constituent, arsenic, is found in exceedance of the ISCO. The instance of arsenic exceeding its' ISCO occurs in SB-2 at 39-41 ft bgs.

4.5 GROUNDWATER SAMPLE RESULTS

A total of four (4) groundwater samples and 1 duplicate were collected during the Site Characterization and analyzed for TCL VOCs, TCL SVOCs, TAL Metals, PCBs and total

cyanide. Laboratory analytical results for constituents detected in the groundwater samples are summarized in Table 4. For evaluation purposes, analytical results were compared with ambient water quality standards (AWQS) and guidance values contained in NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 (NYSDEC, 1998). These standards and guidance values are protective of groundwater quality assuming that groundwater is used as a source of drinking water. That assumption is not applicable to the Site because groundwater is not used now, nor will it be used in the future as a source of drinking water. Accordingly, the use of Class GA standards and guidance values for comparison to Site groundwater data is conservative. The analytical results of the groundwater samples collected from each well are presented on Figure 6. Field measurements and observations as well as analytical results from the groundwater investigation are summarized below.

Field Measurements

Each monitoring well, with the exception of MW-2, was sampled upon reaching parameter stability and turbidity levels below 50 NTU. MW-2, which remained turbid, was sampled once pH, temperature, ORP, and conductivity stabilized to within 10% through three successive readings. During groundwater sampling activities, each monitoring well was monitored for the presence of NAPL. No NAPL or sheens were noted in any of the wells. Visual descriptions and observations made during the groundwater sampling activities are presented on the groundwater sampling records provided in Appendix B.

VOCs

No VOCs were detected in the groundwater samples collected during the Site Characterization.

SVOCs

Three SVOCs were detected in the groundwater samples collected during the Site Characterization. One SVOC (bis (2-ethylhexyl) phthalate) was found in exceedance of its AWQS guidance value in MW-1 with a concentration of 7.9 μ g/L. Bis (2-ethylhexyl) phthalate is a common laboratory contaminant and not related to MGP operations. No other SVOCs were detected above the Class GA GWQS in any of the monitoring wells. Groundwater analytical results for SVOCs are summarized in Table 4 and on Figure 6.

PCBs

No PCBs were detected in the groundwater samples collected during the Site Characterization.

Inorganics

Eighteen (18) inorganic compounds were detected at least once in the groundwater samples collected during the Site Characterization. Of these, five (5) (iron, lead, magnesium, manganese, and sodium) were detected at concentrations in exceedance of their respective AQWS guidance values. Metals within the Site are typically encountered in groundwater within urban areas. Groundwater analytical results for inorganics are summarized in Table 4 and on Figure 6.

EXPOSURE ASSESSMENT

Information collected during the Site Characterization at the former Hunts Point Gas Works MTS Site has been used to qualitatively assess potential exposure pathways for the various detected compounds in Site soils and groundwater.

In general, there is a low potential for exposure to impacted Site soils. Access to the Site is restricted, and most of the area is covered by asphalt and concrete. Soils may be encountered during intrusive activities (e.g., repair of underground utilities); however, it is unlikely that these materials would be encountered during day-to-day Site operations.

Analytical results from the soil samples collected during the Site Characterization indicate most of the Site meets USCOs. The only VOC exceeding USCOs within the site is acetone, which is a common lab contaminant and its concentration is below ISCOs. Only one sample contained SVOCs in exceedance of USCOs. Four of these five compounds (benzo(a)anthracene, benzo(b)fluoranthene, chrysene, and indeno(1,2,3-C,D)pyrene) do not exceed ISCOs. The remaining constituent, benzo(a)pyrene, has had background concentrations in urban fill materials commonly observed at an average of double the USCO (RETEC, 2007). The benzo(a)pyrene concentration detected was below the average concentration noted in the above report. This suggests that the presence of benzo(a)pyrene may have resulted from the use of fill material when Hunts Point was constructed, rather than as a result of MGP operations. In addition, this one sample containing benzo(a)pyrene above the ISCOs is located 39-41 ft bgs so there isn't a risk of direct exposure. Further, the concentration is below the SCOs for protection of groundwater.

Similarly, all metals found in exceedance of USCOs within the Site's soil, with the exception of arsenic, do not exceed ISCOs. In locations within New York City where fill materials are present, arsenic has been observed to exhibit background concentrations in excess of USCOs (RETEC, 2007). Arsenic found in subsurface soils composed of fill material within Manhattan had concentrations ranging from 2.2 to 20.1 mg/kg, suggesting the presence of arsenic may have related to the use of fill material. In addition, this one sample containing arsenic above the ISCOs is located 39 to 41 ft bgs so there isn't a risk of exposure.

Groundwater analytical results indicated the presence of inorganic concentrations in the monitoring wells at the Site above the AWQS and guidance values. However, none of the four monitoring wells (MW-1, MW-2, MW-3, and MW-4) exceeded guidance values for possible MGP-related VOCs or SVOCs.

Groundwater at the Site is currently not used for a potable water source and there are no plans for future use of potable or commercial/industrial groundwater at the Site. The direction of groundwater flow is towards the confluence of the Bronx and East Rivers. The depth of groundwater at the Site is 7.65 ft to 10.80 ft bgs. The majority of the site is contains a cover of asphalt or concrete. Therefore, there is limited potential for exposure to groundwater during intrusive subsurface activities (e.g., repair of underground utilities) at the Site and it is unlikely that groundwater would be encountered during day-to-day Site operations.

CONCLUSIONS AND RECOMMENDATIONS

The following conclusions have been made based on the results of the Site Characterization presented herein:

- No former MGP structures or NAPL were encountered during the Site Characterization.
- No VOCs related to former MGP activities were detected in soil above USCOs.
- Only one soil sample, which is at a depth that precludes direct exposure (39-41 ft), contained SVOC's concentrations above USCOs. Of the SVOCs detected, one exceeded its ISCO but the concentration was below SCOs for protection of groundwater.
- Only one soil sample, which is at a depth that precludes direct exposure (39-41 ft), contained metals concentrations above USCOs. Of the metals detected, one (arsenic) exceeded its ISCO. However, arsenic is commonly found in fill materials in the area.
- No VOCs or SVOCs related to former MGP activities were detected in groundwater.
- Metals in Site groundwater exceeding AWQS guidance values are typically encountered in groundwater in urban areas. Additionally, groundwater at the Site is not used as a source of drinking water.

As stated in Section 1, the purpose of the Site Characterization was to: (1) characterize and identify potential subsurface conditions that may pose a risk to human health and the environment; and (2) to ascertain the potential need for further investigation or remediation. The Site Characterization was successful in identifying and characterizing the subsurface conditions at the Site. In addition, potential exposure pathways were assessed in Section 4 for compounds detected in the site soils and groundwater. No risks to human health or the environment were identified. Therefore, per NYSDEC's DER-10 subsection 3.1(a)(8)(ii), no further investigation is warranted at the Site.

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TABLES

Table 1 Sample Summary Former Hunts Point MTS Gas Works Consolidated Edison Company of New York Site Characterization - October 2014

Location	Sample ID	Depth (bgs)	TCL VOCs	TCL SVOCs	TAL Metals	Dissolved Metals	Cyanide	PCBs
	SOIL SAMPLE	S						
MW-1	MW-1(7-9)	7-9'	X	X	X		X	X
IVI VV - I	MW-1(23-25)	23-35'	X	X	X		X	X
MW-2	MW-2(5-7)	5-7'	X	X	X		X	X
IVI VV -2	MW-2(25-27)	25-27'	X	X	X		X	X
MW-3	MW-3(11-13)	11-13'	X	X	X		X	X
IVI VV -3	MW-3(29-31)	29-31'	X	X	X		X	X
	MW-4(11-13)	11-13'	X	X	X		X	X
MW-4	MW-4A(11-13)*	11-13'	X	X	X		X	X
	MW-4(49-51)	49-51'	X	X	X		X	X
SB-1	SB-1(7-9)	7-9'	X	X	X		X	X
SD-1	SB-1(17-19)	17-19'	X	X	X		X	X
SB-2	SB-2(9-11)	9-11'	X	X	X		X	X
3D-2	SB-2(39-41)	39-41'	X	X	X		X	X
SB-3	SB-3(15-17)	15-17'	X	X	X		X	X
3D-3	SB-3(35-37)	35-37'	X	X	X		X	X
	GROUNDWATER SA	MPLES						
MW-1	MW-1	NA	X	X	X		X	X
IVI VV - I	MW-11*	NA	X	X	X		X	X
MW-2	MW-2	NA	X	X	X	X	X	X
MW-3	MW-3	NA	X	X	X		X	X
MW-4	MW-4	NA	X	X	X		X	X

X - Indicates sample was analyzed

^{* -} Indicates a duplicate sample

Table 2
Summary of Groundwater Elevations
Former Hunts Point MTS Gas Works
Consolidated Edison Company of New York
Site Characterization - October 2014

Monitoring Well Number	Total Well Depth (feet)	Top of Casing Elevation (feet AMSL)	Depth to Water (feet) ⁽¹⁾	Groundwater Elevation (feet AMSL)
MW-1	18.85	12.03	9.95	2.08
MW-2	14.40	9.69	7.65	2.04
MW-3	21.40	12.40	10.80	1.60
MW-4	19.80	12.78	10.12	2.66

Notes:

(1) Measured from top of PVC casing in October 2014

AMSL = Above Mean Sea Level

Elevations are based on the North American Vertical Datum of 1988 (NAVD88)

Table 3 Summary of Soil Analytical Data Former Hunts Point MTS Gas Works Consolidated Edison Company of New York Site Characterization - October 2014

											Field Duplicate of MW-4
Con Ed - Hunts Point			Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3	MW-4	MW-4A
Validated Soil Analytical Data			Sample ID:	MW-1(7-9)-20141001	MW-1(23-25)-20141001	MW-2(5-7)-20141006	MW-2(25-27)-20141007	MW-3(11-13)-20141003	MW-3(29-31)-2014100	6 MW-4(11-13)-20141002	MW-4A(11-13)-20141002
October 2014			Lab Sample Id:	F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09	F4241-03	F4241-04
SDG: F4241			Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft	11 - 13 ft	11 - 13 ft
Detected compounds only			Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
Exceedances highlighted			SDG:	F4241	F4241	F4241	F4241	F4241	F4241	F4241	F4241
			Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC Part 375	Sampled:	10/1/2014 9:58	10/1/2014 11:25	10/6/2014 14:48	10/7/2014 9:50	10/3/2014 14:20	10/6/2014 9:45	10/2/2014 10:05	10/2/2014 10:15
	Unrestricted Use	Industrial Use Soils	Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO. COMPOUND	Soils Criteria	Criteria	UNITS:								
VOLATILES											
71-55-6 1,1,1-TRICHLOROETHANE	680	1000	mg/kg	ND	0.0043 J	ND	ND	ND	ND	ND	ND
XYLMP M,P-XYLENE (SUM OF ISOMERS)	0.26	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
67-64-1 ACETONE	0.05	1000	mg/kg	0.0371	0.013 J	0.0181 J	0.0275 J	0.0185 J	0.1	0.0181 J	0.024 J
75-15-0 CARBON DISULFIDE			mg/kg	0.0035 J	ND	ND	0.0039 J	ND	0.0055 J	ND	ND
100-41-4 ETHYLBENZENE	1	780	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8 ISOPROPYLBENZENE (CUMENE)			mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3 METHYL ETHYL KETONE (2-BUTANONE	0.12	1000	mg/kg	ND	ND	ND	ND	ND	0.0186 J	ND	ND
108-87-2 METHYLCYCLOHEXANE			mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2 METHYLENE CHLORIDE	0.05	1000	mg/kg	0.0035 J	0.0041 J	0.0042 J	0.0054 J	0.0049 J	0.0052 J	0.0054 J	0.0048 J
95-47-6 O-XYLENE (1,2-DIMETHYLBENZENE)	0.26	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
			1		1		1				
Total VOCs			mg/kg	0.0441	0.0214	0.0223	0.0368	0.0234	0.1293	0.0235	0.0288
SEMIVOLATILES	1		1		1		1				
91-57-6 2-METHYLNAPHTHALENE			mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
83-32-9 ACENAPHTHENE	20	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8 ACENAPHTHYLENE	100	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7 ANTHRACENE	100	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.0978 J
56-55-3 BENZO(A)ANTHRACENE	1	11	mg/kg	0.52 J	ND	ND	0.16 J	ND	ND	0.0881 J	0.29 J
50-32-8 BENZO(A)PYRENE	1	1.1	mg/kg	0.41 J	ND	ND	0.13 J	ND	ND	ND	0.23 J
205-99-2 BENZO(B)FLUORANTHENE	1	11	mg/kg	0.56 J	ND	ND	0.15 J	ND	ND	0.0921 J	0.27 J
191-24-2 BENZO(G,H,I)PERYLENE	100	1000	mg/kg	ND	ND	ND	0.15 J	ND	ND	ND	0.12 J
207-08-9 BENZO(K)FLUORANTHENE	0.8	110	mg/kg	ND	ND	ND	0.0924 J	ND	ND	ND	ND
117-81-7 BIS(2-ETHYLHEXYL) PHTHALATE			mg/kg	2.6	0.19 J	ND	0.11 J	0.28 J	0.0954 J	0.83	0.67
218-01-9 CHRYSENE	1	110	mg/kg	0.41 J	ND	ND	0.17 J	ND	ND	0.0936 J	0.26 J
84-66-2 DIETHYL PHTHALATE			mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3 DIMETHYL PHTHALATE			mg/kg	0.61 J	0.35 J	0.53 J	0.5	0.4	0.41 J	0.57	0.39
206-44-0 FLUORANTHENE	100	1000	mg/kg	0.82 J	ND	0.17 J	0.25 J	ND	ND	0.2 J	0.53 J
86-73-7 FLUORENE	30	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
193-39-5 INDENO(1,2,3-C,D)PYRENE	0.5	11	mg/kg	ND	ND	ND	0.12 J	ND	ND	ND	0.11 J
91-20-3 NAPHTHALENE	12	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
85-01-8 PHENANTHRENE	100	1000	mg/kg	0.52 J	ND	ND	0.18 J	ND	ND	0.17 J	0.24 J
108-95-2 PHENOL	0.33	1000	mg/kg	ND	ND	ND	0.0795 J	ND	ND	ND	ND
129-00-0 PYRENE	100	1000	mg/kg	0.71 J	ND	0.19 J	0.23 J	ND	ND	0.18 J	0.48 J
Total SVOCs			A	7.16	0.54	0.89	2.32	0.68	0.51	1.65	3.69
PCBs			mg/kg	7.10	0.34	0.07	2,32	0.08	0.31	1.03	3.07
11096-82-PCB-1260 (AROCLOR 1260)	0.1	25	mg/kg	0.088	ND	ND	ND	ND	ND	ND	ND
METALS											
7429-90-5 ALUMINUM			mg/kg	6130	7320	6730	9300	1420	6030	8030	7780
7440-36-0 ANTIMONY			mg/kg	ND	ND	0.537 J	0.607 J	ND	ND	ND	ND
7440-38-2 ARSENIC	13	16	mg/kg	3.07	1.32	3.29	3.02	3.47	5.49	2.17	2.48
7440-39-3 BARIUM	350	10000	mg/kg	178	75.2	73.8	92	18.1	44.3	84.8	84.4
7440-41-7 BERYLLIUM	7.2	2700	mg/kg	0.404	0.381	0.442	0.496	0.142 J	0.426	0.596	0.536
7440-43-9 CADMIUM	2.5	60	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
7440-70-2 CALCIUM			mg/kg	17600	1800	35200	2680	14900	5330	10700	12100
7440-47-3 CHROMIUM, TOTAL	30	6800	mg/kg	22.3	20.9	15.5	20.9	8.65	18.1	22.3	23.4
7440-48-4 COBALT			mg/kg	7.93	11.9	7.58	11.5	1.65	5.89	12.5	11.2
7440-50-8 COPPER	50	10000	mg/kg	20	18.5	16.6	17.5	8.8	18.6	17.4	18.5
7439-89-6 IRON			mg/kg	15400	20000	16700	23500	5560	17600	21700	19600
7439-92-1 LEAD	63	3900	mg/kg	112	4.17	87.8	35	41	63.2	76.6	113
7439-95-4 MAGNESIUM			mg/kg	6970	3780	18900	4770	5870	4280	9300	9000
7439-96-5 MANGANESE	1600	10000	mg/kg	201	170	227	233	64.8	304	301	322
7439-97-6 MERCURY	0.18	5.7	mg/kg	1.41	ND	0.175	0.053	0.038	0.145	0.064	0.064
7440-02-0 NICKEL	30	10000	mg/kg	38.5	17.9	14.4	17.3	3.38	14	45.2	30.7
7440-09-7 POTASSIUM			mg/kg	1760	4280	1870	3800	337	1480	2410	2060
7782-49-2 SELENIUM	3.9	6800	mg/kg	ND	0.51 J	0.347 J	0.594 J	ND	0.743 J	0.406 J	0.478 J
7440-22-4 SILVER	2	6800	mg/kg	1.07	1.1	1.12	1.52	0.296 J	1.61	1.41	1.25
7440-23-5 SODIUM			mg/kg	765	952	911	2330	1120	11900	2290	2580
7440-62-2 VANADIUM			mg/kg	20.9	32	22.8	28.8	6.87	18.8	34.4	30
7440-66-6 ZINC	109	10000	mg/kg	155	43.9	81.9	72.3	28.8	105	85.9	89.6
OTHER	I				1						1
57-12-5 CYANIDE	27	10000	mg/kg	1.86	ND	0.194 J	0.238 J	0.221 J	0.056 J	0.205 J	0.345

- Notes:
 (1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
 (2) indicates no cleanup objective or background level is available
 (3) ND indicates compound was not detected
 (4) J indicates an estimated concentration

- (4) J+ indicates an estimated concentration that is biased high

 Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

 Shaded values exceed 6NYCRR Part 375 Industrial Use Soil Cleanup Objectives

Page 1 of 2

Table 3 Summary of Soil Analytical Data Former Hunts Point MTS Gas Works Consolidated Edison Company of New York Site Characterization - October 2014

		•						•			
	Hunts Point			Location ID:	MW-4	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3
	Soil Analytical Data				MW-4(49-51)-20141003	SB-1(7-9)-20141007	SB-1(17-19)-20141007	SB-2(9-11)-20141008		SB-3(15-17)-20141009	
October 2 SDG: F42				Lab Sample Id: Depth:	F4241-05 49 - 51 ft	F4241-12 7 - 9 ft	F4241-13 17 - 19 ft	F4241-14 9 - 11 ft	F4241-15 39 - 41 ft	F4241-16 15 - 17 ft	F4241-17 35 - 37 ft
	compounds only			Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
Exceedan	es highlighted			SDG:	F4241	F4241	F4241	F4241	F4241	F4241	F4241
Lixeccum	ing iniginies			Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		NYSDEC Part 375	NYSDEC Part 375	Sampled:	10/3/2014 8:30	10/7/2014 13:47	10/7/2014 14:15	10/8/2014 11:25	10/9/2014 8:30	10/9/2014 11:25	10/9/2014 14:00
		Unrestricted Use	Industrial Use Soils		11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	Soils Criteria	Criteria	UNITS:							
	VOLATILES										
71-55-6	1,1,1-TRICHLOROETHANE	680	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	0.26	1000	mg/kg	ND	ND	ND	ND	0.0095 J+	ND	ND
67-64-1	ACETONE	0.05	1000	mg/kg	0.015 J	0.0086 J	0.0427	0.0162 J	0.11	0.0077 J	0.0112 J
75-15-0	CARBON DISULFIDE			mg/kg	ND	ND	0.0065	ND	0.0113	ND	ND
100-41-4	ETHYLBENZENE	1	780	mg/kg	ND	ND	ND	ND	0.047 J+	ND	ND
98-82-8 78-93-3	ISOPROPYLBENZENE (CUMENE)			mg/kg	ND	ND	ND	ND	0.0441 J+	ND	ND
108-87-2	METHYL ETHYL KETONE (2-BUTANONE) METHYLCYCLOHEXANE	0.12	1000	mg/kg	ND ND	ND ND	ND ND	ND ND	0.0329 J 0.0022 J	ND ND	ND ND
75-09-2	METHYLE YCLOHEXANE METHYLENE CHLORIDE	0.05	1000	mg/kg	0.0051 J	0.0049 J	0.0053 J	0.0058	0.0022 J	0.0027 J	0.0062
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	0.03	1000	mg/kg	0.0031 J ND	0.0049 J ND	0.0033 J ND	0.0038 ND	0.0146 0.0099 J+	0.0027 J ND	0.0062 ND
7J=41=0	O-ATELIAE (1,2-DIMETHTEBENZENE)	0.20	1000	mg/kg	ND	ND	ND	ND	0.0099 J+	ND	ND
	Total VOCs			mg/kg	0.0201	0.0135	0.0545	0.022	0.2815	0.0104	0.0174
	SEMIVOLATILES				****	******	*****	01000	******		
91-57-6	2-METHYLNAPHTHALENE			mg/kg	ND	ND	ND	ND	0.7 J	ND	ND
83-32-9	ACENAPHTHENE	20	1000	mg/kg	ND	ND	ND	ND	0.61 J	ND	ND
208-96-8	ACENAPHTHYLENE	100	1000	mg/kg	ND	ND	ND	ND	0.48 J	ND	ND
120-12-7	ANTHRACENE	100	1000	mg/kg	ND	ND	ND	ND	1.4	ND	ND
56-55-3	BENZO(A)ANTHRACENE	1	11	mg/kg	ND	ND	ND	0.88 J	2.1	ND	ND
50-32-8	BENZO(A)PYRENE	1	1.1	mg/kg	ND	ND	ND	0.62 J	1.6	ND	ND
205-99-2 191-24-2	BENZO(B)FLUORANTHENE	1 100	11 1000	mg/kg	ND ND	ND ND	ND ND	0.8 J 0.39 J	1.5 0.75 J	ND ND	ND ND
207-08-9	BENZO(G,H,I)PERYLENE BENZO(K)FLUORANTHENE	0.8		mg/kg	ND ND	ND ND	ND ND	0.39 J 0.46 J	0.75 J 0.62 J	ND ND	ND ND
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	0.8	110	mg/kg mg/kg	ND ND	0.14 J	ND ND	1.3 J	ND	0.4	ND ND
218-01-9	CHRYSENE	1	110	mg/kg	ND ND	ND	ND ND	0.78 J	1.9	ND	ND ND
84-66-2	DIETHYL PHTHALATE	-		mg/kg	ND	ND	ND	ND	ND	0.38	0.32 J
131-11-3	DIMETHYL PHTHALATE			mg/kg	0.35 J	0.41	0.44	ND	0.71 J	0.38	0.46
206-44-0	FLUORANTHENE	100	1000	mg/kg	ND	0.12 J	0.0864 J	1.9	2.9	0.074 J	ND
86-73-7	FLUORENE	30	1000	mg/kg	ND	ND	ND	ND	0.67 J	ND	ND
193-39-5	INDENO(1,2,3-C,D)PYRENE	0.5	11	mg/kg	ND	ND	ND	0.39 J	0.68 J	ND	ND
91-20-3	NAPHTHALENE	12	1000	mg/kg	ND	ND	ND	ND	0.36 J	ND	ND
85-01-8	PHENANTHRENE	100	1000	mg/kg	ND	0.0869 J	ND	1.2 J	3.7	ND	ND
108-95-2	PHENOL	0.33	1000	mg/kg	ND	ND	ND	ND	ND	ND	ND
129-00-0	PYRENE	100	1000	mg/kg	ND	0.1 J	0.0864 J	1.5 J	3.2	ND	ND
	T. 4.1 SVOC			a	0.35	0.00	0.61	10.22	22.00	1.22	0.78
	Total SVOCs PCBs			mg/kg	0.35	0.86	0.61	10.22	23.88	1.23	0.78
11096-82-	PCB-1260 (AROCLOR 1260)	0.1	25	mg/kg	ND	ND	ND	ND	ND	ND	ND
11070 02	METALS	0.1			112		113		112	112	110
7429-90-5	ALUMINUM			mg/kg	3160	7420	8130	6700	10100	1710	7730
7440-36-0				mg/kg	ND	ND	0.963 J	ND	0.998 J	ND	ND
	ARSENIC	13	16	mg/kg	0.789 J	2.73	3.54	3.4	21.6	1.23	1.83
	BARIUM	350	10000	mg/kg	46.2	90.3	77.1	134	228	12.9	73
	BERYLLIUM	7.2	2700	mg/kg	0.218 J	0.455	0.493	0.455	0.696	0.124 J	0.477
	CADMIUM	2.5	60	mg/kg	ND	ND	ND	ND 24000	0.682	ND	ND 2000
	CALCIUM CUROMUM TOTAL	20		mg/kg	1160	1370	8590	34000	6130	785	2090
	CHROMIUM, TOTAL COBALT	30	6800	mg/kg	12 4.81	18.6 11.7	19.3	31.2 7.17	49.8 10.47	4.72 1.95	22.8 10.83
7440-48-4		50	10000	mg/kg mg/kg	7.16	18.5	8.31 21	31.1	150	4.04	21.6
7439-89-6			10000	mg/kg	9190	20700	17900	17600	26800	5340	20800
7439-92-1		63	3900	mg/kg	6.39	53.1	121	131	478	10.07	4
	MAGNESIUM			mg/kg	1410	3270	6730	12900	6200	1030	4100
	MANGANESE	1600	10000	mg/kg	261 J	322	226	238	272	68.2	152
	MERCURY	0.18	5.7	mg/kg	0.011 J	0.07	0.155	0.138	2.07	0.019	ND
7440-02-0		30	10000	mg/kg	7.66	19.8	15.4	16.9	30.1	3.24	18.9
	POTASSIUM			mg/kg	1110 J+	2880	1730	1430	2940	335	3330
	SELENIUM	3.9	6800	mg/kg	ND	0.489 J	0.451 J	0.283 J	1.89	ND	0.612 J
7440-22-4		2	6800	mg/kg	0.53	1.35	1.2	1.16	6.76	0.31 J	1.3
7440-23-5				mg/kg	2320	876	1920	2500	8500	79.9 J	3540
7440-62-2	VANADIUM ZING	109	10000	mg/kg	14.8 20.6	25.4 71.5	22.2 96.1	27.5	32.4	6.52	32.1 41.3
/440-00-0	OTHER	109	10000	mg/kg	20.0	/1.3	90.1	162	551	16.2	41.3
57-12-5	CYANIDE	27	10000	mg/kg	0.065 J	0.075 J	0.04 J	8.42	1.49	ND	0.13 J
31-12-3	CILLIDE	21	10000	mg/kg	0.005 3	0.075 3	U.UT J	0.72	1.7/	ND	0.15 5

- Notes:
 (1) 6NYCRR Part 375 Environmental Remediation Programs (December 14, 2006)
 (2) indicates no cleanup objective or background level is available
 (3) ND indicates compound was not detected
 (4) J indicates an estimated concentration

- (4) J+ indicates an estimated concentration that is biased high

 Shaded values exceed 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives

 Shaded values exceed 6NYCRR Part 375 Industrial Use Soil Cleanup Objectives

Page 2 of 2

Table 4 Summary of Groundwater Analytical Data Former Hunts Point MTS Gas Works Consolidated Edison Company of New York Site Characterization - October 2014

					Field Duplicate			
Con Ed - H	unts Point		Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4
Validated G	Froundwater Analytical Data		Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031
October 201	14		Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05
SDG: F455	66		Source:	CTECH	CTECH	CTECH	CTECH	CTECH
Detected Co	ompounds Only		SDG:	F4556	F4556	F4556	F4556	F4556
	s Highlighted		Matrix:	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
		NYSDEC	Sampled:	10/30/2014 11:00	10/30/2014 11:20	10/31/2014 15:10	10/31/2014 10:05	10/30/2014 13:20
		Class GA	Validated:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CAS NO.	COMPOUND	Standards	UNITS:	11/2 //2011	11/21/2011	11/2//2011	11/21/2011	11/21/2011
	VOLATILES			ND	ND	ND	ND	ND
	SEMIVOLATILES							
91-57-6	2-METHYLNAPHTHALENE		ug/l	7.2 J	18.7	ND	ND	ND
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	5	ug/l	7.9 J	ND	ND	ND	ND
85-01-8	PHENANTHRENE	50	ug/l	ND ND	4.3 J	ND	ND	3.1 J
65-01-6	PCBs	0.09	ug/l	ND	ND	ND	ND	ND ND
—	METALS	0.07	ug/1	110	TVD	TVD	1112	IND
7429-90-5	ALUMINUM		ug/l	156	219	13300	59.1	1970
7440-38-2	ARSENIC	25	ug/l	4.34 J	4.7 J	7.34 J	3.09 J	3.44 J
7440-38-2	BARIUM	1000	ug/l ug/l	301	294	266	53.9	555
7440-39-3	BERYLLIUM	3	ug/l	ND	ND	0.72 J	ND	ND
7440-41-7	CALCIUM	-		121200	119900	95000	153100	604600
7440-70-2	CHROMIUM, TOTAL		ug/l					
		50	ug/l	4.44 J	10.48	35.2	ND	4.91 J
7440-48-4	COBALT		ug/l	ND	ND	11.9 J	ND	6.07 J
7440-50-8	COPPER	200	ug/l	ND	2.45 J	35.6	8.12 J	9.7 J
7439-89-6	IRON	300	ug/l	3280	3400	16700	148	6300
7439-92-1	LEAD	25	ug/l	6.31	5.97 J	151	1.85 J	11.2
7439-95-4	MAGNESIUM	35000	ug/l	12600	12600	43000	553000	180900
7439-96-5	MANGANESE	300	ug/l	1270	1250	1120	13.5	8260
7439-97-6	MERCURY	0.7	ug/l	ND	ND	0.589	ND	ND
7440-02-0	NICKEL		ug/l	ND	ND	34.3	ND	6.98 J
7440-09-7	POTASSIUM		ug/l	13700	13800	37600	213400	186400
7440-23-5	SODIUM	20000	ug/l	459800	457300	2895100	ND	23762000
7440-62-2	VANADIUM		ug/l	ND	ND	28.5	ND	ND
7440-66-6	ZINC	2000	ug/l	6.79 J	8.35 J	130	ND	7.59 J
	DISSOLVED METALS							
7429-90-5	ALUMINUM		ug/l			52		
7440-38-2	ARSENIC	25	ug/l			7.19 J		
7440-39-3	BARIUM	1000	ug/l			161		
7440-70-2	CALCIUM	NA	ug/l			111300		
7440-50-8	COPPER	200	ug/l			10.75		
7439-89-6	IRON	300	ug/l			145		
7439-92-1	LEAD	25	ug/l			4.78 J		
7439-95-4	MAGNESIUM	35000	ug/l			46100		
7439-96-5	MANGANESE	300	ug/l			1120		
7440-02-0	NICKEL		ug/l			13.2 J		
7440-09-7	POTASSIUM		ug/l			39300		
7440-66-6	ZINC	2000	ug/l			13.3 J		
	OTHER					2.2.3		
57-12-5	CYANIDE	200	mg/l	0.011	0.012	0.235	0.011	0.132

⁽¹⁾ NYSDEC TOGS 1.1.1 Ambient Water Quality Standards and Guidance Values (June 1998)

PARSONS Page 1 of 1

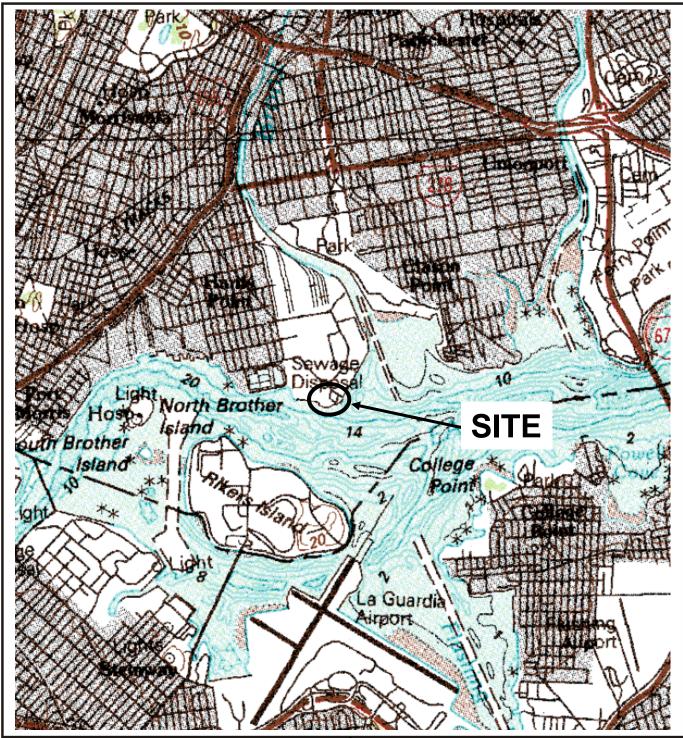
^{(2) --} indicates no standard or guidance value is available

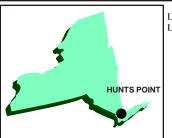
⁽³⁾ ND indicates compound was not detected

⁽⁴⁾ J indicates an estimated concentration

⁽⁵⁾ Shaded values exceed NYSDEC Class GA Groundwater Standards and Guidance Values

FIGURES





New York Quadrangle LATITUDE: N40° 48' 33" LONGITUDE: W73° 52' 48"



SOURCE: DeLORME 3-D TOPOQUAD PROGRAM

FIGURE 1

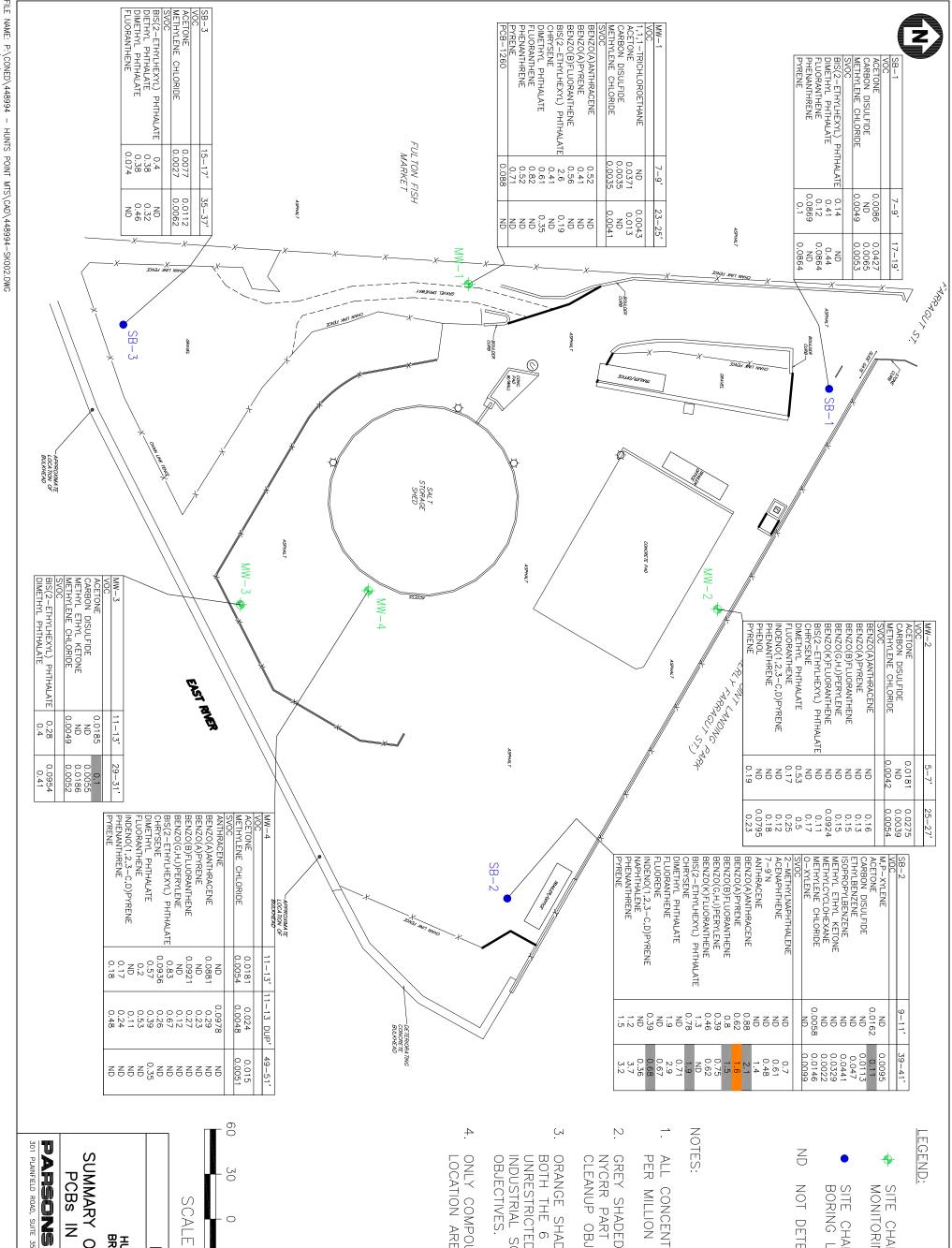
CONSOLIDATED EDISON COMPANY OF NEW YORK
FORMER HUNTS POINT GAS WORKS
MTS PARCEL
BRONX, NEW YORK

SITE VICINITY MAP

PARSONS

200 COTTONTAIL ROAD, SOMERSET NJ 08873 PHONE: (732) 537-3500





- SITE CHARACTERIZATION
 MONITORING WELL LOCATIONS
- SITE CHARACTERIZATION SOIL BORING LOCATIONS
- NOT DETECTED
- PER MILLION (ppm) ALL CONCENTRATIONS ARE IN PARTS
- GREY SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
- INDUSTRIAL SOIL CLEANUP ORANGE SHADED VALUES EXCEED BOTH THE 6 NYCRR PART 375 UNRESTRICTED AND RESTRICTED OBJECTIVES.
- ONLY COMPOUNDS DETECTED AT EACH LOCATION ARE SHOWN.

SCALE: 0 1"=60; 60

301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NEW YORK 13212 PHONE:315-451-9560

- MONITORING WELL LOCATIONS SITE CHARACTERIZATION
- SITE CHARACTERIZATION SOIL BORING LOCATIONS
- NOT DETECTED
- PER MILLION (ppm) CONCENTRATIONS ARE IN PARTS
- GREY SHADED VALUES EXCEED 6 NYCRR PART 375 UNRESTRICTED SOIL CLEANUP OBJECTIVES.
- INDUSTRIAL SOIL CLEANUP ORANGE SHADED VALUES EXCEED BOTH THE 6 NYCRR PART 375 UNRESTRICTED AND RESTRICTED

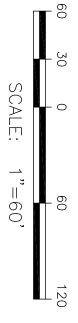
FIGURE 5

1"=60

PLAINFIELD ROAD, SUITE 350, SYRACUSE, NEW YORK 13212 PHONE:315-451-9560

 \equiv

- SITE CHARACTERIZATION
 MONITORING WELL LOCATIONS
- SITE CHARACTERIZATION SOIL BORING LOCATIONS
- NOT DETECTED
- ALL CONCENTRATIONS ARE IN PARTS PER BILLION (ug/L)
- SHADED VALUES EXCEED NYSDEC AMBIETT WATER QUALITY CLEANUP OBJECTIVES.
- COMPOUNDS THAT EXCEEDED NYSDEC AMBIENT WATER QUALITY CLEANUP OBJECTIVES IN ONE OR MORE GROUNDWATER SAMPLES SHOWN.
- NO VOCS OR PCBS EXCEEDED NYSDEC AMBIENT WATER QUALITY CLEANUP OBJECTIVES.



~	
CON EDISON HUNTS POINT MTS BRONX, NEW YORK OF VOCS SVOCS PO	

SUMMARY UMMARY OF VOCS, SVOCS, PCBS, AND METALS IN GROUNDWATER

PARSONS
301 PLAINFIELD ROAD, SUTIE 350, SYRACUSE, NEW YORK 13212 PHONE:315-451-9560

APPENDIX A SOIL BORING AND MONITORING WELL LOGS

					PARSONS	BORING/WELL	ID: MW-1
					DRILLING RECORD		Sheet 1 of 1
Contracto	r: Advanced Dri	lling Technolog	y (ADT))		Location Description:	
Driller: Tom Sheerin, German Torres					PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Along western drivewa	y of the MTS property
Inspector:	Zohar Lavy			-	PROJECT NUMBER: 448994-01000		
Rig Type:	Truck CME-7	15		-"	-		
	GROUNDWATE		TIONS				
Water	DTW	DTW			Weather: Clouds and Rain, up to high 60s		
Level	~11 ft bgs	9.9 ft bgs				See Site Pla	ın
Date	10/1/14	10/10/14			Date/Time Start: 10/1/14 0950		
ime	1013	900					
Aeas.					Date/Time Finish: 10/1/14 1500		
rom	Split Spoon	TOC					
Sample Depth	Sample I.D.	SPT	Rec.	PID (ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS
+1							Locking J-plug on
							inner wall
0		Vactron		NA	0-6" COBBLE and ORGANICS, some brown, fine to medium Sand, trace Silt		Flush Mount Well
1		Vactron		0.0	6"-5' Dry, brown, fine to medium SAND, some Cobble, little Brick, trace Wood	▎▐▋▁▍▔▍▐▜▁	0.0-0.5' Cover and Concrete
2		Vactron		0.0		<i>[/]</i>	Cement/Bentonite
3		Vactron		0.0			Grout (0' - 5')
4		Vactron		0.0		1 <i>12</i> 17 1	2-inch ID PVC Riser
5		33-10-7-7	50	0.0	0-6" CONCRETE; 6-12" Dry, dark brown, fine to medium SAND, little fine sub-angular	1 HH-4 HHHL	(0.5-9')
6					Gravel, trace Concrete, trace Silt	」 ₩	
7	MW-1 (7-9)	5-7-7-4	75	0.0	0-6" Dry, dark brown, fine to medium SAND, some sub-angular fine to coarse Gravel, little	1 1884 1884	Bentonite (5-7')
8					fine sub-angular Gravel, trace Concrete, trace Silt; 6-18" Dry, dark brown, fine to medium	1 1884 1881	
					SAND, trace Silt, trace Brick fragments		
9		5-3-3-3	0	NA	No Recevery	▎▕░░▟▞░░▍	#1 Sand
10							(7-19')
11		3-3-4-4	33	0.0	Wet, dark grey/brown, fine to medium SAND, trace Silt, trace sub-round fine to medium		
13		1226	22	0.0	Gravel		
14		1-2-3-6	33	0.0	Wet, dark grey/brown, fine to medium SAND, trace Silt, trace sub-round fine to medium Gravel, trace Concrete		
15		3-5-6-24	25	0.0	,		0.02-inch slot PVC
16		3-3-0-24	23	0.0	Wet, dark grey/brown, fine to medium SAND, some Gneiss Cobble, trace Silt, trace sub-round fine to medium Gravel, trace Concrete		Well Screen 2"-ID (9' - 19')
17		10-5-11-12	83	0.0	0-6" Wet, dark grey/brown, fine to medium SAND, some Gneiss Cobble, trace Silt, trace sub-	1 (33) - (33)-	**CII 3CICCII 2 -ID (7 - 19)
18		10-5-11-12	0.5	0.0	round fine to medium Gravel, trace Concrete, slight organic odor; 6-14" Moist, grey, fine		
					SAND, some Silt, trace fine sub-angular Gravel; 14-20" Moist, tan, fine SAND, some Silt,		
					trace fine sub-angular Gravel		PVC End Cap (19')
19		8-18-17-20	50	0.0	Moist, dark grey, fine to medium SAND, some Silt, little sub-round fine Gravel	 	
20					. 3 2		
21		12-18-26-31	75	0.0	Moist, light brown, fine to medium SAND, little Silt, trace Schist Cobble, trace fine to medium	1	
22					sub-round Gravel		
23	MW-1 (23-25)	6-27-27-28	83	0.0	Moist, light brown/grey, fine SAND, some Silt, little weathered Gneissic Schist	1	
24	(= = /						
25		50/0"	0	NA	No Recevery	1	
					End of Boring at 25 ft bgs	1	
	SAMPLING METH	OD			COMMENTS:		
	WH = WEIGHT OF H	IAMMER			0-5 ft bgs was hand cleared		
	HC = HAND CLEAR	ED			5-25 ft bgs advanced utilizing hollow stem augers and split spoons		
	VC = VACUUM CLE	EARED					
	WOR = WEIGHT OF	RODS					

					PARSONS	BORING/WELL ID: MW-2
					DRILLING RECORD	Sheet 1 of 1
Contracto		lling Technolog				Location Description:
Driller:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Along northeast property boundry
Inspector:					PROJECT NUMBER: 448994-01000	
Rig Type:						
	GROUNDWATE		TONS			
Water	DTW	DTW			Weather: Clear, up to low 70s	-
Level	~ 7 ft bgs	7.28				See Site Plan
Date	10/6/14 1452	10/10/14			Date/Time Start: 10/6/14 1440	4
Γime	1432	1220			D 4 / FP : 1 10 / 14 100 /	
Meas. From	Split Spoon	TOC			Date/Time Finish: 10/7/14 1025	1
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC COMMENTS
Depth	I.D.	SFI	(%)	(ppm)	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC COMMENTS
+1			(/0)	(FF)		Locking J-plug on
						inner wall
0		Vactron		NA	0-4" ASPHALT	Flush Mount Well
1		Vactron		0.0	4"-5' Dry, dark browm, fine to medium SAND and COBBLE, little fine to coarse sub-angular	
					Gravel, trace Concrete debris	0.0-0.5' Cover and Concrete
2		Vactron		0.0		Bentonite (0-3')
3		Vactron		0.0		1 1884 [22]
4		Vactron		0.0		2-inch ID PVC Riser
5	MW-2 (5-7)	7-6-3-4	75	0.0	Moist, brown, fine to medium SAND, some fine to coarse angular to sub-round Gravel, little	(0.5-5')
6					Concrete debris, trace Silt	
7		1-1-1-2	67	0.0	Wet, brown/orange, fine to medium SAND, little fine to coarse sub-angular Gravel, trace Silt,	1 [63] [63] [1] [63]
8					trace weathered Gneiss	
9		1-2-2-4	67	0.1	0-13" Wet, brown/orange, fine to medium SAND, little fine to coarse sub-angular Gravel,	#1 Sand
10					trace Silt, trace weathered Gneiss; 13-16" BRICK	(3-15)
11		2-6-3-1	33	0.0	Wet, brown, fine to medium SAND, little fine sub-round Gravel, trace Silt	
12		2-0-3-1	33	0.0	The committee of the co	
					W. J. G. J. GAND. d. LG. C. G. C.	Well Screen 2"-ID (5' - 15')
13		WH-1-20-31	50	0.0	Wet, brown, fine to medium SAND, some weathered Gneissic Schist, little fine sub-round Gravel, trace Silt	
14					,	PVC End Cap (15')
15		35-18-5-5	42	0.0	0-4" Wet, brown, fine to medium SAND, some weathered Gneissic Schist, little fine sub-round	0.02-inch slot PVC
16					Gravel, trace Silt; 4-10" Wet, black, fine SAND and angular GRAVEL]
17		15-17-16-16	50	0.1	0-4" Wet, grey SILT, some fine Sand; 4-12" Wet, dark brown, fine to medium SAND, some	
18					Silt, little weathered Gneissic Schist]
19		6-9-10-13	50	0.1	Moist, brown/grey fine to medium SAND and weathered GNEISSIC SCHIST	
20]
21		9-17-15-11	42	0.1	Moist, brown/grey fine to medium SAND and weathered GNEISSIC SCHIST	
22]
23		9-7-4-6	67	0.1	Moist, brown, medium SAND, little weathered Gneissic Schist	
24]
25	MW-2 (25-27)	6-6-1-1	58	0.2	0-8" Moist, brown, medium SAND, little weathered Gneissic Schist; 8-14" Moist, grey CLAY	
26						
27		WH-1-1-2	75	0.1	Moist, grey CLAY	
28						
29					End of Boring at 29 ft bgs	
	SAMPLING METHO				COMMENTS:	
	WH = WEIGHT OF H				0-5 ft bgs was hand cleared	
	HC = HAND CLEAR				5-29 ft bgs advanced utilizing hollow stem augers and split spoons	
	VC = VACUUM CLE WOR = WEIGHT OF				-	
	HOK - WEIGHT OF	NOD3				

					PARSONS	BORING/WELL	BORING/WELL ID: MW-3	
	Tom Sheerin, German Torres Zohar Lavy				DRILLING RECORD	Sheet 1 of 1 Location Description: Along southern edge of MTS property.		
Contractor					PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property			
riller:								
spector:					PROJECT NUMBER: 448994-01000			
ig Type:	Truck CME-7							
, I	GROUNDWATE		TONS		W 41 Cl 41 70			
	DTW ~ 9 ft bgs	DTW 8.45			Weather: Clear, up to low 70s	G G': DI		
evel ate	10/3/14	10-10-14			Date/Time Start: 10/3/14 1130	See Site Pla	an	
	1415	1415			Date/Time Start: 10/3/14 1130	-		
leas.	1110	1413			Date/Time Finish: 10/6/14 1000			
rom	Split Spoon	TOC			Date Tillian 10/0/11 1000	1		
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS	
Depth	I.D.		(%)	(ppm)				
+1							Locking J-plug on	
							inner wall	
0						∮ г , — р г		
0		Vactron		NA	0-12" ASPHALT	M 📥 🖊	Flush Mount Well	
1		Vactron		0.0	12"-3' Dry, grey, fine to medium SAND and medium to coarse sub-angular GRAVEL	<u> </u>	0.0-0.5' Cover and Concrete	
2		Vactron		0.0	3-5' Moist, brown, fine to medium SAND, little Wood, little medium to coarse sub-angular	<i>[2]</i> [2]	Cement/Bentonite	
3		Vactron		0.0	Gravel, trace Concrete debris		Grout (0' - 7')	
4		Vactron		0.0			2-inch ID PVC Riser	
					Dry, grey/brown, fine to medium SAND and CONCRETE debris, some coarse angular Gravel	+ 1/2 //	-	
5		28-16-18-18	67	0.0	Dry, grey/orown, fine to medium SAIND and CONCRETE deorts, some coarse angular Gravet		(0.5-11')	
6		ļ						
7		30-16-12-12	75	0.0	0-6" Dry, grey/brown, fine to medium SAND and CONCRETE debris, some coarse angular			
8					Gravel; 6-12" Moist, tan/brown medium to coarse SAND; 12-18" Moist, black, medium to		Bentonite (7-9')	
					coarse SAND			
9		14-10-11-6	50	0.0	Dry, grey/brown, fine to medium SAND, some fine to coarse angular to sub-round Gravel,	1 55 55		
10		14-10-11-0	30	0.0	little Concrete, trace Brick	1 1991 1991		
					·	▍ ▕░░ ▎▃ ▍░▍		
11	MW-3 (11-13)	5-4-4-3	33	0.1	Dry, tan, medium SAND, some Concrete			
12							#1 Sand	
13		6-3-2-2	67	0.2	0-14" Wet, tan/orange, medium to coarse SAND, trace fine sub-round Gravel; 14-16" Wet,	1 1005	(9-21')	
14		0322		0.2	black, medium to coarse SAND, trace fine sub-round Gravel	1 1999 1 999	(/ 21/	
					W. H. L. F. CAND C. C. L. LC. L.	▎▕░╞╡░╽		
15		2-1-1-2	58	0.0	Wet, black, medium to coarse SAND, trace fine sub-round Gravel		0.02-inch slot PVC	
16							Well Screen 2"-ID (11' - 21')	
17		1-2-2-3	83	0.1	Wet, black, medium to coarse SAND, trace fine sub-round Gravel	1 100 100		
18								
					Wet, black, medium to coarse SAND, trace fine sub-round Gravel	1 1884		
19		7-4-2-2	75	0.1	wet, black, incutain to coarse SALVD, trace this sub-found Graver			
20] <u>[:::1 :::1</u>	PVC End Cap (21')	
21		3-3-2-2	67	0.2	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel			
22								
23		10-5-4-4	75	0.1	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel	1		
24								
25		14-9-3-4	75	0.1	Wet, dark grey, medium to coarse SAND, trace fine sub-round Gravel	1		
		14-9-3-4	13	0.1	Thei, dark grey, medicin to coarse served, trace time sub-round Graver			
26		ļ			W. F. GAYD. C. L. LG. L. F. L. C.	4		
27		4-3-2-2	83	0	Wet, grey, medium to coarse SAND, trace fine sub-round Gravel, slight sulphur odor			
28						_		
29	MW-3 (29-31)	WH-WH-2-1	33	0.1	0-6" Wet, grey, medium to coarse SAND, trace fine sub-round Gravel, slight sulphur odor; 6-			
30					8" Moist, grey CLAY, trace Shell			
31		3-1-1-1	50	0.1	0-10" Moist, grey CLAY; 10-12" Moist, grey CLAY, little Sand, trace Shell, trace fine sub-	1		
32		3-1-1-1	50	0.1	angular Gravel			
		l				4		
33					End of Boring at 33 ft bgs	<u> </u>		
SAMPLING METHOD					COMMENTS:			
WH = WEIGHT OF HAMMER					0-5 ft bgs was hand cleared			
	HC = HAND CLEARED VC = VACUUM CLEARED				5-33 ft bgs advanced utilizing hollow stem augers and split spoons			
	WOR = WEIGHT OF				-			

					PARSONS	BORING/WELL ID: MW-4			
					DRILLING RECORD	Sheet 1 of 2			
	Advanced Dri		y (ADT)			Location Description:			
riller:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Adjacent to southern edge of s	alt storage structure		
spector: ig Type:		5			PROJECT NUMBER: 448994-01000				
ig Type:	GROUNDWATE		TONE			+			
/ater	DTW	DTW	IONS		Weather: Cloudy, up to high 60s				
evel	~ 15 ft bgs	10.21			Cloudy, up to high oos	See Site Plan			
	10/2/14	10-14-14			Date/Time Start: 10/2/14 0910	See She I han			
ime	1034	0845				1			
Ieas.					Date/Time Finish: 10/3/14 1120				
rom	Split Spoon	TOC				1			
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	SCHEMATIC	COMMENTS		
Depth	I.D.		(%)	(ppm)					
+1						Lo	cking J-plug on		
						inr	ner wall		
0		Vactron		NA	0-16" ASPHALT	† _	ish Mount Well		
					16"-4' Moist, grey, fine SAND and fine to coarse sub-angular GRAVEL, trace Silt				
1		Vactron		0.0	10 - Moist, grey, thie SAMD and thie to coarse sub-angular ORAVEL, trace Silt		0-0.5' Cover and Concret		
2		Vactron		0.0			Cement/Bentonite		
3		Vactron	1	0.0	4-5' Wet, grey, fine SAND and fine to coarse sub-angular GRAVEL, little Cobble, trace Silt		Grout (0' - 9')		
4		Vactron		0.0			2-inch ID PVC Riser		
5		4-11-21-21	83	0.3	0-6" Wet, dark brown, fine to medium SAND, some fine to coarse angular to sub-round	1 <i>[// [//</i>] [_]	(0.5-13')		
6		+-11-21-21	0.0	0.3	Gravel, trace Brick; 6-20" Dry, dark brown, fine to medium SAND, some fine to coarse		(0.3-13)		
0					angular to sub-round Gravel, trace Brick				
									
7		5-9-16-18	67	0.4	0-10" Moist, dark brown, fine to medium SAND, some fine to coarse angular to sub-round				
8					Gravel, trace Brick; 10-12" BRICK; 12-16" Moist, brown, fine to medium SAND, little Silt,				
					little fine sub-angular Gravel				
9		18-16-34-17	92	1.1	0-8" Moist, brown, fine to medium SAND, little Silt, little fine sub-angular Gravel, trace	1 [15] 5]	Bentonite (9-11')		
		10-10-54-17	72	1.1	Brick; 8-22" Dry, brown, fine to medium SAND, little fine to coarse sub-angular Gravel, trace		Jenionne (7-11)		
10					Silt	 			
						│ ┝╇┯┦╞┯╇┥│			
11	MW-4 (11-13)	14-10-5-4	75	1.0	0-14" Dry, orange/brown, fine to medium SAND, little fine to coarse sub-angular Gravel, trace	4 - 1888 1 - 1884 1 - 1			
12					Silt; 14-18" Dry, orange/brown, fine to medium SAND, little fine to coarse sub-angular	1994 1994 1			
					Gravel, trace Silt, trace Brick, slight hydrocarbon odor	1 19991 1991 1			
13		15-9-6-4	58	1.0	Moist, dark grey, fine to medium SAND, little Silt, little coarse sub-angular Gravel, little	1 1888 1881 1			
14		15-7-0-4	50	1.0	Cobble fragments				
						4			
15		2-3-2-5	33	1.1	0-6" Moist, dark grey, fine to medium SAND, little Silt; 6-8" Moist, dark grey, fine to medium		#1 Sand		
16					SAND, little Silt, black staining		(11-23')		
17		7-7-8-7	100	0.5	Moist, grey/brown, fine to medium SAND, some fine to coarse sub-angular to sub-round	1 (897)			
18					Gravel, little Silt, trace Wood, striated staining				
			L	-	Wet desk and section CAND and section to account a Count of County	4 (:::} - :::			
19		3-3-1-3	58	0.4	Wet, dark grey, medium SAND, some medium to coarse angular Gravel, trace Silt		0.02-inch slot PVC		
20			<u></u>			Well	Screen 2"-ID (13' - 23')		
21		2-4-9-5	67	0.2	Wet, black, medium SAND, little fine to medium sub-angular Gravel				
22			<u> </u>				PVC End Cap (23')		
		2122	42	0.1	Wat black madium SAND little fine to madium sub-angular Graval little Silt to Points	 	- C Eliu Cap (23)		
23		2-1-2-2	42	0.1	Wet, black, medium SAND, little fine to medium sub-angular Gravel, little Silt, trace Brick, trace Wood				
24						<u> </u>			
25		4-6-4-8	75	0.1	0-16" Wet, dark grey, fine to medium SAND, some Silt, trace Wood; 16-18" BRICK				
26									
27		6-5-5-5	0	NA	No Recovery]			
28									
29		6-8-7-8	67	0.1	Wet, dark grey, fine to coarse SAND, trace Silt	- I			
30		0-0-7-8	0/	0.1	Galla groj, tine to course of true, true out				
					A ACHINA A A A A A A A A A A A A A A A A A A	4			
		6-5-5-2	83	0.0	0-18" Wet, dark grey, fine to medium SAND; 18-20" BRICK				
31			l	l		1			
31 32	SAMPLING METHO)D			COMMENTS:				
31 32	WH = WEIGHT OF H	AMMER	I		0-5 ft bgs was hand cleared	<u> </u>			
31 32		AMMER ED	<u>I</u>						

					PARSONS	BORING/WELL	ID: MW-4	
					DRILLING RECORD		Sheet 2 of 2	
Contracto Driller: Inspector: Rig Type:	nspector: Zohar Lavy				PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property PROJECT NUMBER: 448994-01000	Location Description: Adjacent to southern edge of salt storage structure		
Water Level Date Time Meas. From	GROUNDWATER OBSERVATIONS BTW DTW - 15 ft bgs 10.21			PID	Weather: Cloudy, up to high 60s Date/Time Start: 10/2/14 0910 Date/Time Finish: 10/3/14 1120 FIELD IDENTIFICATION OF MATERIAL	See Site Plan		
Depth	I.D.		(%)	(ppm)				
33 34 35		1/12"-4-4 6-8-14-18	100	0 0.4	0-16" Wet, dark grey, fine to medium SAND, little Silt; 16-24" Moist, tan/grey fine to medium SAND, some Silt, little fine to coarse sub-angular Gravel Moist, tan/grey fine to medium SAND, some Silt, little fine to coarse sub-angular Gravel, trace			
36					Mica			
37 38		7-17-29-32	100	0.1	0-6" Wet, grey, fine to medium SAND and fine to medium angular to round Gravel; 6-24" Moist, orange/brown, fine to medium SAND, little fine to medium sub-round Gravel, trace Silt			
39 40		4-18-21-23	92	0.2	0-12" Moist, grey, fine to medium SAND, little fine to medium sub-round Gravel, trace Silt; 12-22" Moist, orange/brown, fine to medium SAND, little fine to medium sub-round Gravel, trace Silt, trace weathered Schist			
41 42		5-7-50/1"	42	0.3	Moist, orange/brown fine to medium SAND, some weathered white/tan Schist	-		
43		NA	NA	NA	NA	-	Augered through boulder/impedance from approximately 42-45 ft bgs	
45 46		WH-1-1-4	100	1.7	Wet, light brown, medium SAND	1	11	
47 48		6-6-10-12	100	1.5	Wet, light brown, medium SAND, trace fine to medium round Gravel	1		
49 50	MW-4 (49-51)	5-9-12-14	100	1.5	Wet, light brown, medium SAND, trace fine to medium round Gravel	1		
51	ī.			1	End of Boring at 51 ft bgs	1		
	SAMPLING METH WH = WEIGHT OF F HC = HAND CLEAR VC = VACUUM CLE WOR = WEIGHT OF	IAMMER ED EARED			COMMENTS: 0-5 ft bgs was hand cleared 5-51 ft bgs advanced utilizing hollow stem augers and split spoons			

				PARSONS	BORING/WELL I	D: SB-1		
					DRILLING RECORD		Sheet 1 of 1	
Contracto Driller: Inspector: Rig Type:	Inspector: Zohar Lavy			·	PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property PROJECT NUMBER: 448994-01000	Location Description: Adjacent to MTS property entrance		
	GROUNDWATE	ER OBSERVAT	TIONS					
Water	DTW	DTW			Weather: Clear, up to low 70s			
Level	~ 9 ft bgs					See Site Plan	<u>l</u>	
Date	10/7/14				Date/Time Start: 10/7/14 1330			
Time Meas.	1333		-		Date/Time Finish: 10/7/14 1430			
From	Split Spoon				Date/Time Finish: 10///14 1430	_		
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL	1	COMMENTS	
Depth	I.D.	~	(%)	(ppm)				
+1								
0		Vactron		NA	0-4" ASPHALT	1		
1		Vactron		0.0	4"-3' Dry, dark brown fine to medium SAND, some fine to coarse sub-angular Gravel, little			
2		Vactron		0.0	Brick			
3		Vactron		0.0	3-5' Dry, dark brown fine to medium SAND and CONCRETE debris, some fine to coarse sub-			
4		Vactron		0.0	angular Gravel, little Brick			
5		2-4-4-3	75	0.1	Moist, dark brown, fine to coarse SAND, some Concrete debris, little Brick, little fine to			
6		2-7-5	15	0.1	coarse sub-angular Gravel, trace Silt			
7	SB-1 (7-9)	3-2-2-1	67	0.0	Dry, orange/brown, medium SAND, trace Brick	1		
8								
9		3-2-1-2	58	0.1	Wet, dark grey, fine to medium SAND and SILT, little fine to medium sub-angular Gravel			
10								
11		1-1-WH-1	100	0.2	0-18" Wet, dark grey, fine to medium SAND and SILT; 18-24" Wet, dark grey, fine to			
12					medium SAND, some Silt, trace fine sub-angular Gravel, trace Shell			
13		WH/12"-1-1	67	0.1	Wet, dark grey, fine SAND, little Silt, little fine to medium angular to sub-angular Gravel	1		
14]		
15		WH/18"-1	67	0.2	Wet, dark grey, fine SAND, little Silt, little fine to medium angular to sub-angular Gravel			
16								
17	SB-1 (17-19)	WH-2-1-2	75	0.2	0-14" Wet, dark grey, fine SAND, little Silt, little fine to medium angular to sub-angular]		
18					Gravel; 14-18" Moist, grey CLAY			
19		1-1-1-1	75	0.3	Moist, grey CLAY	1		
20]		
21					End of Boring at 21 ft bgs			
	SAMPLING METH	OD			COMMENTS:	<u> </u>		
	WH = WEIGHT OF H				0-5 ft bgs was hand cleared			
	HC = HAND CLEAR	ED			5-21 ft bgs advanced utilizing hollow stem augers and split spoons			
	VC = VACUUM CLE							
	WOR = WEIGHT OF	KODS						

					PARSONS	BORING/WELL ID: SB-2			
					DRILLING RECORD		Sheet 1 of 2		
Contractor		illing Technology			PROJECT VALUE OF THE STATE OF T	Location Description			
Oriller: nspector:	Zohar Lavy	German Torres		•	PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property PROJECT NUMBER: 448994-01000	Adjacent to eastern edge of MTS property			
Rig Type:	Truck CME-	75			TROOLET TEMBER: 440/94-01000				
	GROUNDWAT		IONS						
	DTW	DTW			Weather: Partly cloudy, up to high 60s				
Level Date	~ 11 ft bgs 10/8/14	+			Data/Time Staut. 10/9/14 1020	See Site Pl	an		
	1130				Date/Time Start: 10/8/14 1030				
Meas.					Date/Time Finish: 10/9/14 0850				
From	Split Spoon				-				
Sample	Sample I.D.	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL		COMMENTS		
Depth	1.D.	+	(%)	(ppm)		ļ			
+1									
0		**			0-4" ASPHALT	4			
-		Vactron		NA	4				
1		Vactron		0.0	4"-2' Dry, dark grey, fine to medium SAND and WOOD, little Cobble, trace Silt, trace Brick				
2		Vactron		0.0	0.000				
3		Vactron		0.0	2-3' Moist, tan, medium to coarse SAND				
4		Vactron		0.0	3-5' Moist, dark grey/brown fine to medium SAND, some fine to coarse sub-angular Gravel,				
		Vactron			little Brick, little Silt				
5		9-28-17-20	67	0.1	Moist, dark brown, fine to medium SAND, some Concrete, little Brick, little fine to coarse sub-	•			
6					angular to round Gravel				
7		12-12-20-20	58	0.2	Moist, brown/olive fine SAND, some Concrete, little Brick, little fine to coarse sub-angular to				
8					round Gravel				
9	SB-2 (9-11)	4-7-2-3	67	0.1	Moist, brown, fine to medium SAND, little Silt, trace Brick, trace medium sub-angular Gravel				
10									
11		4-6-5-6	58	0.1	Wet, brown, fine to medium SAND, some Silt				
12									
13		1-1-2-14	0	NA	No Recovery				
14		1-1-2-14	-	11/21					
15		5-6-1-2	75	0.4	Wet, brown, fine to medium SAND, some Silt, little weathered Gneissic Schist	-			
16		3-0-1-2	13	0.4	The committee of the co				
17		2-2-3-2	83	0.1	Wet, brown, fine to medium SAND, some Silt	_			
18		2-2-3-2	0.5	0.1	wet, brown, the to medium british, some one				
19		WH-2-8-7		27.4	No Recovery	_			
20		WH-2-8-7	0	NA	INO RECOVERY		Schist Cobble in tip of cutting		
					Wet, brown, fine to medium SAND, some Silt, little weathered Gneissic Schist	4	shoe		
21		8-6-5-5	42	0.0	wet, brown, fine to medium SAND, some Sitt, fittle weathered Gheissic Schist				
22					W. c. L. C. C. P. GAND Foll City Foll C. C. P. L. C. L.				
23		4-2-7-6	42	0.1	Wet, brown/grey, fine to medium SAND, little Silt, little fine to medium angular to round Gravel, trace weathered Schist				
24					-				
25		5-2-4-4	33	0.2	Wet, brown/grey, fine to medium SAND, little Silt, little fine to medium angular to round				
26		1			Gravel, trace weathered Schist	4			
27		4-6-8-8	58	0.3	0-12" Wet, brown/grey, fine to medium SAND, little Silt, little fine to medium angular to				
28		1			round Gravel, trace weathered Schist; 12-14" Wet, brown/grey, fine to medium SAND, little fine to medium angular to round Gravel, trace weathered Schist				
					-				
29		WOR-2-6-6	42	0.3	0-7" Wet, black, fine SAND and SILT, slight organic odor; 7-10" Wet, black, fine SAND and				
30					fine angular GRAVEL, trace leather/fiberous material				
31		11-14-14-10	75	0.1	0-6" Wet, black, fine SAND and fine angular GRAVEL, trace leather/fiberous material; 6-18"				
32	· · · · · · · · · · · · · · · · · · ·				Wet, grey/black, medium to coarse SAND and fine to coarse angular to sub-round GRAVEL,				
					some Brick				
33		9-7-5-5	92	0	Wet, grey/black, medium to coarse SAND and fine to coarse angular to sub-round GRAVEL				
34									
35		20-31-25-21	83	0.0	Wet, grey, medium to coarse SAND and fine to coarse angular to sub-round GRAVEL				
36		T		l					
	SAMPLING METE	IOD			COMMENTS:	1	1		
	WH = WEIGHT OF I				0-5 ft bgs was hand cleared				
	HC = HAND CLEAF	RED			5-43 ft bgs advanced utilizing hollow stem augers and split spoons				
	VC = VACUUM CL								
		EARED			5-43 ft bgs advanced utilizing hollow stem augers and split spoons				

					PARSONS	BORING/WELL	ID: SB-2		
					DRILLING RECORD		Sheet 2 of 2		
Contracto	r: Advanced Dri	lling Technology	(ADT)			Location Description:			
Driller:	Tom Sheerin,	German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	e of MTS property			
Inspector					PROJECT NUMBER: 448994-01000				
Rig Type:	Truck CME-7	5							
	GROUNDWATE	ER OBSERVAT	IONS						
Water	DTW	DTW			Weather: Partly cloudy, up to high 60s				
Level	~ 11 ft bgs					See Site Pla	n		
Date	10/8/14				Date/Time Start: 10/8/14 1030				
Time	1130								
Meas.					Date/Time Finish: 10/9/14 0850				
From	Split Spoon								
Sample	Sample	SPT	Rec.	PID	FIELD IDENTIFICATION OF MATERIAL		COMMENTS		
Depth	I.D.		(%)	(ppm)					
37		14-12-11-9	83	0.1	Wet, black, medium to coarse SAND and fine to coarse angular to sub-round GRAVEL				
38									
39	SB-2 (39-41)	3-2-4-3	75	0.2	0-8" Wet, black, medium to coarse SAND and fine to coarse angular to sub-round GRAVEL,				
40	,				trace Silt; 8-18" Moist, black/dark grey fine SAND and CLAY, sulphur/methane odor				
-10					•				
					V. C.	1			
41		3-3-3-4	67	0.2	Moist, grey CLAY, little Shell				
42									
					End of Boring at 43 ft bgs				
	SAMPLING METH	OD			COMMENTS:				
	WH = WEIGHT OF H	AMMER			0-5 ft bgs was hand cleared		•		
	HC = HAND CLEAR	ED			5-43 ft bgs advanced utilizing hollow stem augers and split spoons				
	VC = VACUUM CLE	ARED							
	WOR = WEIGHT OF	RODS			·		·		

					PARSONS	BORING/WELL ID: SB-3			
					DRILLING RECORD	Sheet 1 of 2			
ontracto	r: Advanced Dri	lling Technology	(ADT)			Location Description:			
riller:		German Torres			PROJECT NAME: Con Edison /Hunts Point Gas Works - MTS Property	Southwest corner of MTS property			
spector:				:	PROJECT NUMBER: 448994-01000				
ig Type:									
	GROUNDWATE		IONS						
	DTW ∼ 17 ft bgs	DTW			Weather: Clear, up to low 70s, Breezy	Cas Cita Diam			
evel ate	10/9/14				Date/Time Start: 10/9/14 1030	See Site Plan			
ime	1130				Date/Time Start. 10/9/14 1030	_			
Aeas.					Date/Time Finish: 10/9/14 1500				
rom	Split Spoon								
Sample				PID	FIELD IDENTIFICATION OF MATERIAL	COMMENTS			
Depth	I.D.		(%)	(ppm)					
+1									
0		Vactron		NA	0-6" Dry, brown, fine to medium SAND, some fine to coarse sub-angular to round Gravel,	7			
1		Vactron		0.0	little Organics				
2		Vactron		0.0	6"-5' Dry, brown, fine to medium SAND and COBBLE, some fine to coarse sub-angular to				
3					round Gravel, little Organics				
4		Vactron		0.0					
		Vactron		0.0	D. II. I. C	4			
5		8-10-9-6	42	0.1	Dry, black, fine to coarse SAND, little fine to coarse angular to sub-angular Gravel, trace				
6					Glass	<u> </u>			
7		15-15-14-11	33	0.0	COBBLE				
8]							
9		15-9-18-24	75	0.0	Dry, black, fine to medium SAND, some fine to coarse angular to sub-angular Gravel, little	7			
10					Brick fragments, trace Concrete				
11		34-29-26-20	83	0.1	0-16" Dry, brown, fine to medium SAND, little fine to medium angular Gravel, trace Cobble,	†			
12		54-23-20-20	0.5	0.1	trace Silt; 16-20" Dry, tan, medium to coarse SAND				
				0.4	0-10" Dry, brown, fine to medium SAND, little fine to medium angular Gravel, trace Cobble,	-			
13		15-21-15-15	75	0.1	trace Silt; 10-18" Dry, tan, medium to coarse SAND				
14					-	<u> </u>			
15	SB-3 (15-17)	3-6-7-6	75	0.2	Moist, tan/brown, medium to coarse SAND, trace fine sub-round Gravel				
16									
17		5-4-4-4	92	0.2	0-10" Wet, tan/brown, medium to coarse SAND, trace fine sub-round Gravel; 10-22" Wet,				
18					black, medium to coarse SAND, little Shell, trace fine sub-round Gravel				
19		4-1/12"-6	50	0.1	Wet, black, medium to coarse SAND, trace fine sub-round Gravel	1			
20									
21		2-5-5-7	50	0.0	Wet, black, medium to coarse SAND, trace fine sub-round Gravel	1			
22		233,	50	0.0	,,				
23		22 10 19 17	75	0.0	Wet, grey, medium to coarse SAND, trace fine sub-round Gravel	-			
24		22-10-18-17	75	0.0					
		 	<u> </u>		0.228 Wet black and from the course CAND three for such assert Course 1 to 10.204 at 10.	-			
25		38-30-17-10	100	0.0	0-22" Wet, black, medium to coarse SAND, trace fine sub-round Gravel, trace Brick; 22-24" Wet, black, fine to medium SAND				
26						<u> </u>			
27		7-8-8-8	50	0	0-4" Wet, black, fine to medium SAND; 4-12" Moist, brown/olive, fine to medium SAND,				
28					some Silt, trace coarse angular Gravel]			
29		44-42-17-20	33	0	Moist, brown/olive, fine to medium SAND, some Silt	7			
30									
31		10-49-17-15	50	0	Moist, brown, fine SAND, little fine sub-round Gravel, little Silt, trace weathered Gneissic				
32		, ., ., 10			Schist				
33		50/2"	0	NA	No Recovery	-			
		30/2	U	INA	1.0.1.00.0.0.				
34		 	<u> </u>		Maint harrow for CAND link for our money Council link file to a control of the council link file to the council link file	-			
35	SB-3 (35-37)	13-18-22-25	75	0.0	Moist, brown, fine SAND, little fine sub-round Gravel, little Silt, trace weathered Gneissic				
36					Schist				
37		28-35-50/0"	0	NA	No Recovery				
38					End of Boring at 38 ft bgs				
	SAMPLING METH	OD			COMMENTS:	•			
	WH = WEIGHT OF H				0-5 ft bgs was hand cleared				
	HC = HAND CLEAR	ED			5-38 ft bgs advanced utilizing hollow stem augers and split spoons				

PARSONS

WOR = WEIGHT OF RODS

APPENDIX B GROUNDWATER SAMPLING LOGS

PARSONS

GROUNDWATER SAMPLING RECORD SITE NAME: Con Edison (Hunts Point MTS) PROJECT NUMBER: 448994-01000 **Purge Date:** October 30, 2014 **Sampling Date:** October 30, 2014 Samplers: Zohar Lavy Parsons / Somerset, NJ SAMPLE ID: MW-1, MW-11 (duplicate), MW-1 MS, MW-1 MSD Low Flow Purge Monsoon Pump **Sampling Method:** WELL PURGING Static Water Level (TOC): 9.95 Depth to Well Bottom (TOC): 18.85 **CALCULATIONS:** Ft. of Water in Well X (GAL / FT) =Gallons 1-inch Casing: Ft. of Water in Well x 0.041 = Gallons 2-inch Casing: Ft. of Water in Well 1.42 Gallons x 0.16 =3-inch Casing: Ft. of Water in Well x 0.32 =Gallons 4-inch Casing: Ft. of Water in Well Gallons x 0.64 =Method: Low Flow Purge Monsoon Pump SAMPLE DESCRIPTION No Odor Other: Clear FIELD TESTS PURGE PURGE **PURGE** PURGE **PURGE PURGE** PURGE SAMPLE Time 1025 1030 1035 1040 1045 1050 1055 1100 Depth To Water (TOC) (ft) 10.05 10.05 10.05 10.05 10.05 10.05 10.05 10.06 16.85 16.85 16.85 16.85 16.85 16.85 16.85 16.85 Depth To Pump (TOC) (ft) ~250 ~250 ~250 ~250 Flow Rate (ml/min) ~350 ~350 ~300 ~250 Volume of Water Purged ~0.5 ~1.0 ~1.5 ~1.75 ~2.0 ~2.5 ~3.0 ~3.25 pH (s.u.) 7.52 7.60 7.57 7.53 7.54 7.54 7.56 7.56 Conductivity (mS/cm) 3.01 2.47 2.45 2.41 2.46 2.48 3.6 3.41 Turbidity (NTUs) 142 165 125 111 62.7 11.9 0 0 Dissolved Oxygen (mg/L) 7.49 3.39 2.87 2.09 1.93 1.76 1.72 1.7 15.87 16.57 Temperature (Degrees C) 15.96 16.05 16.17 16.26 16.18 16.23 -130 -139 -52 -122 -134 -137 ORP (mV) -81 -105 1.9 Salinity (%) 1.7 1.4 1.3 1.2 1.2 1.2 1.2 TDS (g/L) 2.30 2.13 1.92 1.56 1.55 1.55 1.55 1.55 SAMPLE ANALYSIS / LABORATORY TCL VOCs, SVOCs, TAL Metals, CN, PCBs Analyze For: Shipped Via: Chemtech Laboratory

Sample collected at 1100, ~ 3.25 Gallons purged

Other Notes:

SITE NAME: Con Edison (Hunts Point MTS)

PROJECT NUMBER: 448994-01000

 Purge Date:
 October 30, 2014

 Sampling Date:
 October 30, 2014

Samplers: Zohar Lavy of Parsons / Somerset, NJ

Gallons

SAMPLE ID: MW-2

Sampling Method: Low Flow Purge Monsoon Pump

WELL PURGING

Static Water Level (TOC): 7.65

Depth to Well Bottom (TOC): 14.40

CALCULATIONS: Ft. of Water in Well X (GAL/FT) =

1-inch Casing: Ft. of Water in Well x 0.041 = Gallons 2-inch Casing: Ft. of Water in Well 6.75 x = 0.16 =1.08 Gallons 3-inch Casing: Ft. of Water in Well Gallons x 0.32 =4-inch Casing: Ft. of Water in Well x 0.64 =Gallons

Method: Low Flow Purge Monsoon Pump

SAMPLE DESCRIPTION

Odor: No Odor

Other: Very Turbid

FIELD TESTS

ED TESTS								
	PURGE							
Time	1410	1415	1420	1425	1430	1435	1440	1445
Depth To Water (TOC) (ft)	8.21	8.40	8.52	8.61	8.65	8.73	8.81	8.82
Depth To Pump (TOC) (ft)	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Flow Rate (ml/min)	~200	~200	~100	~150	~100	~150	~100	~150
Volume of Water Purged	~0.25	~0.5	~0.75	~0.75	~1.0	~1.0	~1.25	~1.25
pH (s.u.)	7.74	7.69	7.65	7.64	7.63	7.62	7.62	7.63
Conductivity (mS/cm)	17.5	17.2	17.1	17.0	17.0	16.9	16.8	16.7
Turbidity (NTUs)	Error							
Dissolved Oxygen (mg/L)	5.21	3.07	3.0	2.91	2.83	2.75	2.68	2.64
Temperature (Degrees C)	17.81	17.93	18.03	17.85	18.01	18.15	18.24	18.10
ORP (mV)	-25	-43	-36	-32	-28	-24	-23	-22
Salinity (%)	10.3	10.0	10.0	9.9	9.9	9.9	9.8	9.8
TDS (g/L)	10.9	10.6	10.6	10.5	10.5	10.4	10.4	10.3

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOCs, SVOCs, TAL Metals, CN, PCBs, Dissolved Metals

Shipped Via: Chemtech

Laboratory

Other Notes: Sample collected at 1510, ~ 2 Gallons purged

SITE NAME: Con Edison (Hunts Point MTS)

PROJECT NUMBER: 448994-01000

 Purge Date:
 October 30, 2014

 Sampling Date:
 October 30, 2014

Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-2

Sampling Method: Low Flow Purge Monsoon Pump

WELL PURGING

Static Water Level (TOC): 7.65

Depth to Well Bottom (TOC): 14.40

 CALCULATIONS:
 Ft. of Water in Well
 X (GAL / FT) =
 Gallons

 1-inch Casing:
 Ft. of Water in Well
 x 0.041 =
 Gallons

1-inch Casing:Ft. of Water in Wellx 0.041 =Gallons2-inch Casing:Ft. of Water in Well6.75x 0.16 =1.08 Gallons3-inch Casing:Ft. of Water in Wellx 0.32 =Gallons4-inch Casing:Ft. of Water in Wellx 0.64 =Gallons

Method: Low Flow Purge Monsoon Pump

SAMPLE DESCRIPTION

Odor: No Odor

Other: Very Turbid

FIELD TESTS

	PURGE	PURGE	PURGE	PURGE	SAMPLE
Time	1450	1455	1500	1505	1510
Depth To Water (TOC) (ft)	8.82	8.83	8.82	8.83	8.83
Depth To Pump (TOC) (ft)	13.00	13.00	13.00	13.00	13.00
Flow Rate (ml/min)	~100	~150	~150	~100	~150
Volume of Water Purged	~1.5	~1.5	~1.75	~1.75	~2.0
pH (s.u.)	7.63	7.63	7.64	7.63	7.63
Conductivity (mS/cm)	16.7	16.8	16.7	16.7	16.8
Turbidity (NTUs)	Error	Error	Error	Error	Error
Dissolved Oxygen (mg/L)	2.61	2.57	2.55	2.53	2.51
Temperature (Degrees C)	18.15	18.03	18.12	18.09	18.13
ORP (mV)	-22	-21	-21	-20	-21
Salinity (%)	9.8	9.8	9.8	9.8	9.8

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOCs, SVOCs, TAL Metals, CN, PCBs, Dissolved Metals

10.3

10.2

10.2

10.2

Shipped Via: Chemtech

Laboratory

TDS (g/L)

Other Notes: Sample collected at 1510, ~ 2 Gallons purged

10.3

SITE NAME: Con Edison (Hunts Point MTS)

PROJECT NUMBER: 448994-01000

 Purge Date:
 October 31, 2014

 Sampling Date:
 October 31, 2014

Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-3

Sampling Method: Low Flow Purge Monsoon Pump

WELL PURGING

Static Water Level (TOC): 10.80
Depth to Well Bottom (TOC): 21.40

 CALCULATIONS:
 Ft. of Water in Well
 X (GAL/FT) = Gallons

 1-inch Casing:
 Ft. of Water in Well
 x 0.041 = Gallons

 2-inch Casing:
 Ft. of Water in Well
 10.60 x 0.16 = 1.70 Gallons

 2-inch Casing:
 Ft. of Water in Well
 10.60
 x 0.16 =
 1.70 Gallons

 3-inch Casing:
 Ft. of Water in Well
 x 0.32 =
 Gallons

 4-inch Casing:
 Ft. of Water in Well
 x 0.64 =
 Gallons

 Method:
 Low Flow Purge Monsoon Pump

SAMPLE DESCRIPTION

Odor: No Odor

Other: Clear

FIELD TESTS

PURGE **PURGE** PURGE **PURGE PURGE PURGE PURGE** SAMPLE Time 0930 0935 0940 0945 0950 0955 1000 1005 Depth To Water (TOC) (ft) 11.07 11.20 11.25 11.31 11.35 11.05 11.11 11.37 Depth To Pump (TOC) (ft) 19.40 19.40 19.40 19.40 19.40 19.40 19.40 19.40 Flow Rate (ml/min) ~400 ~400 ~300 ~300 ~250 ~200 ~250 ~250 Volume of Water Purged ~0.5 ~1.25 ~2.0 ~2.5 ~2.75 ~3.25 ~3.5 ~3.75 pH (s.u.) 7.74 7.70 7.69 7.68 7.67 7.67 7.67 7.67 Conductivity (mS/cm) 30.4 30.2 30.2 30.2 30.2 30.2 30.2 30.2 21.6 Turbidity (NTUs) 84.4 36.1 10.5 4.6 0 0 0 Dissolved Oxygen (mg/L) 19.05 12.53 10.27 9.62 8.53 8.47 8.42 8.36 Temperature (Degrees C) 15.40 15.80 15.86 15.86 15.83 15.79 15.81 15.78 ORP (mV) 67 0.0 -21 -13 -10 -9 -9 -8 Salinity (%) 18.7 18.6 18.6 18.6 18.6 18.6 18.6 18.5

18.4

18.4

18.4

18.4

18.4

18.4

18.4

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOCs, SVOCs, TAL Metals, CN, PCBs

18.5

Shipped Via: Chemtech

Laboratory

TDS (g/L)

Other Notes: Sample collected at 1005, ~ 3.75 Gallons purged

SITE NAME: Con Edison (Hunts Point MTS)

PROJECT NUMBER: 448994-01000

 Purge Date:
 October 30, 2014

 Sampling Date:
 October 30, 2014

Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-4

Sampling Method: Low Flow Purge Monsoon Pump

WELL PURGING

 Static Water Level (TOC):
 10.12

 Depth to Well Bottom (TOC):
 19.80

Depth to Well Bottom (TOC): 19.80

CALCULATIONS: Ft. of Water in Well

X (GAL / FT) =Gallons 1-inch Casing: Ft. of Water in Well x 0.041 = Gallons 2-inch Casing: Ft. of Water in Well 9.68 x = 0.16 =1.55 Gallons 3-inch Casing: Ft. of Water in Well Gallons x 0.32 =4-inch Casing: Ft. of Water in Well x 0.64 =Gallons

Method: Low Flow Purge Monsoon Pump

SAMPLE DESCRIPTION

Odor: No Odor

Other: Clear

FIELD TESTS

ED TESTS								
	PURGE							
Time	1225	1230	1235	1240	1245	1250	1255	1300
Depth To Water (TOC) (ft)	10.51	10.80	10.86	10.92	10.95	10.98	10.99	10.98
Depth To Pump (TOC) (ft)	17.80	17.80	17.80	17.80	17.80	17.80	17.80	17.80
Flow Rate (ml/min)	~250	~300	~250	~300	~250	~250	~250	~250
Volume of Water Purged	~0.25	~0.5	~0.75	~1.25	~1.75	~2.25	~2.5	~2.75
pH (s.u.)	7.22	7.28	7.38	7.41	7.45	7.47	7.48	7.51
Conductivity (mS/cm)	74.8	78.6	83.1	86.5	89.5	91.4	91.6	92.7
Turbidity (NTUs)	Error	Error	471	196	135	141	112	79.3
Dissolved Oxygen (mg/L)	1.82	1.43	1.15	1.08	0.97	0.94	0.93	0.94
Temperature (Degrees C)	18.61	18.35	18.09	18.11	18.11	18.01	17.62	17.68
ORP (mV)	-99	-107	-119	-122	-128	-129	-128	-130
Salinity (%)	51.8	54.3	58.2	60.9	63.2	64.7	65.2	66.5
TDS (g/L)	45.3	47.1	50.1	52.0	53.8	54.8	55.3	55.8

SAMPLE ANALYSIS / LABORATORY

Analyze For: TCL VOCs, SVOCs, TAL Metals, CN, PCBs

Shipped Via: Chemtech

Laboratory

Other Notes: Sample collected at 1320, ~ 3.75 Gallons purged. Well is immediately adjacenet to NYDOS salt storage

SITE NAME: Con Edison (Hunts Point MTS)

PROJECT NUMBER: 448994-01000

Purge Date: October 30, 2014 **Sampling Date:** October 30, 2014

Samplers: Zohar Lavy of Parsons / Somerset, NJ

SAMPLE ID: MW-4

Sampling Method: Low Flow Purge Monsoon Pump

WELL PURGING

Static Water Level (TOC): 10.12

Depth to Well Bottom (TOC): 19.80

> **CALCULATIONS:** Ft. of Water in Well X (GAL / FT) =Gallons 1-inch Casing: Ft. of Water in Well x 0.041 = Gallons 2-inch Casing: Ft. of Water in Well 9.68 x = 0.16 =1.55 Gallons 3-inch Casing: Ft. of Water in Well Gallons x 0.32 =4-inch Casing: Ft. of Water in Well x 0.64 = Gallons

Method: Low Flow Purge Monsoon Pump

SAMPLE DESCRIPTION

Odor: No Odor

Other: Clear

FIELD TESTS

	PURGE	PURGE	PURGE	SAMPLE
Time	1305	1310	1315	1320
Depth To Water (TOC) (ft)	10.95	10.95	10.95	10.95
Depth To Pump (TOC) (ft)	17.80	17.80	17.80	17.80
Flow Rate (ml/min)	~250	~250	~250	~250
Volume of Water Purged	~3.0	~3.25	~3.5	~3.75
pH (s.u.)	7.53	7.55	7.55	7.56
Conductivity (mS/cm)	93.7	94.5	95.2	95.6
Turbidity (NTUs)	62.5	53.2	49.6	48.1
Dissolved Oxygen (mg/L)	0.92	0.89	0.87	0.85
Temperature (Degrees C)	17.70	17.82	17.73	17.69
ORP (mV)	-133	-134	-134	-136
Salinity (%)	67.7	67.9	68.4	69.1
TDS (g/L)	57.1	57.5	58.6	58.8

SAMPLE ANALYSIS / LABORATORY

TCL VOCs, SVOCs, TAL Metals, CN, PCBs Analyze For:

Shipped Via: Chemtech

Laboratory

Other Notes: Sample collected at 1320 ~ 3.75 Gallons purged. Well is immediately adjacenet to NYDOS salt storage

APPENDIX C DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT

HUNTS POINT

Prepared For:



CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

31-01 20th Avenue Long Island City, NY 11105

Prepared By:

PARSONS

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APRIL 2015

TABLE OF CONTENTS

		<u>Page</u>
SECTION 1 DATA USAB	ILITY SUMMARY	1-1
1.1 LABORATORY DA	ATA PACKAGES	1-1
1.2 SAMPLING AND O	CHAIN-OF-CUSTODY	1-1
1.3 LABORATORY AI	NALYTICAL METHODS	1-1
1.3.1 Volatile Orga	nic Analysis	1-2
1.3.2 Semivolatile	Organic Analysis	1-2
1.3.3 Polychlorinate	ed Biphenyls (PCBs) Analysis	1-2
1.3.4 Inorganic Ana	alysis	1-3
SECTION 2 DATA VALI	DATION REPORT	2-1
2.1 GROUNDWATER		2-1
2.1.1 Volatiles		2-1
2.1.2 Semivolatiles		2-1
2.1.4 Inorganics		2-4
2.2 SOILS		2-5
2.2.1 Volatiles		2-5
2.2.2 Semivolatiles		2-6
2.2.3 Polychlorinate	ed Biphenyls (PCBs)	2-8
2.2.4 Inorganics		2-8
1.1 LABORATORY DATA PACKAGES 1-1 1.2 SAMPLING AND CHAIN-OF-CUSTODY 1-1 1.3 LABORATORY ANALYTICAL METHODS 1-1 1.3.1 Volatile Organic Analysis 1-2 1.3.2 Semivolatile Organic Analysis 1-2 1.3.3 Polychlorinated Biphenyls (PCBs) Analysis 1-2 1.3.4 Inorganic Analysis 1-3 ECTION 2 DATA VALIDATION REPORT 2-1 2.1 GROUNDWATER 2-1 2.1.1 Volatiles 2-1 2.1.2 Semivolatiles 2-1 2.1.3 Polychlorinated Biphenyls (PCBs) 2-3 2.1.4 Inorganics 2-4 2.2 SOILS 2-5 2.2.1 Volatiles 2-5 2.2.2 Semivolatiles 2-5 2.2.1 Volatiles 2-5 2.2.2 Semivolatiles 2-6 2.2.3 Polychlorinated Biphenyls (PCBs) 2-8 2.2.4 Inorganics 2-8 LIST OF ATTACHMENTS TTACHMENT A VALIDATED LABORATORY DATA FOR GROUNDWATER SAMPLES ATTACHMENT A-2 VALIDATED LABORATORY DATA FOR		
ATTACHMENT A VALII	DATED LABORATORY DATA	
ATTACHMENT A-1		
ATTACHMENT A-2	VALIDATED LABORATORY DATA FOR SOIL SAMPLES	

SECTION 1

DATA USABILITY SUMMARY

Groundwater samples were collected from the Consolidated Edison Hunts Point site on October 30, 2014 through October 31, 2014. Soil samples were collected on October 1, 2014 through October 9, 2014. Analytical results from these samples were validated and reviewed by Parsons for usability with respect to the following requirements:

- Work Plan.
- NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs).

The analytical laboratory for this project was Chemtech. This laboratory is certified to perform project analyses by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP).

1.1 LABORATORY DATA PACKAGES

The laboratory data package turnaround time, defined as the time from sample receipt by the laboratory to receipt of the analytical data packages by Parsons, was 28 days for the project samples.

The data packages received from Chemtech were paginated, complete, and overall were of good quality. Comments on specific quality control (QC) and other requirements are discussed in detail in the attached data validation report which is summarized by media in Section 2.

1.2 SAMPLING AND CHAIN-OF-CUSTODY

The samples were collected, properly preserved, shipped under a chain-of-custody (COC) record, and received at Chemtech within one to eight days of sampling. All samples were received intact and in good condition at the laboratory.

1.3 LABORATORY ANALYTICAL METHODS

Both the groundwater samples and the soil samples that were collected from the site were analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), metals, cyanide, and polychlorinated biphenyls (PCBs) using appropriate SW846 methods. Summaries of issues concerning these laboratory analyses are presented in Subsections 1.3.1 through 1.3.4. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability (PARCC) are discussed for each analytical method by media in Section 2. The laboratory data were reviewed and may be qualified with the following validation flags:

- "U" The analyte was analyzed for but was not detected at the value given.
- "UJ" The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
 - "J" The result is an estimated quantity.
- "J+" The result is an estimated quantity, but the result may be biased high.
- "J-" The result is an estimated quantity, but the result may be biased low.

"R" The data are unusable.

The validated laboratory data were tabulated and are presented in Attachment A.

1.3.1 Volatile Organic Analysis

Groundwater samples were analyzed for VOCs using the USEPA SW-846 8260C analytical method. The reported groundwater VOC analytical data did not require qualification resulting from data validation. The reported groundwater VOC analytical results were 100% complete (i.e., usable) for the groundwater data. PARCC requirements were met.

Soil samples were analyzed for VOCs using the USEPA SW-846 8260C analytical method. Certain reported results for soil VOC samples were qualified as estimated based upon surrogate recoveries, matrix spike recoveries, instrument calibrations, and internal standard responses. The reported VOC analytical results were 98.6% complete (i.e., usable) for the soil data. PARCC requirements were met overall.

1.3.2 Semivolatile Organic Analysis

Groundwater samples were analyzed for SVOCs using the USEPA SW-846 8270D analytical method. Certain reported results for the groundwater SVOC samples were qualified as estimated based upon surrogate recoveries, instrument calibrations, and field duplicate precision. The reported SVOC analytical results were 100% complete (i.e., usable) for the groundwater data. PARCC requirements were met.

Soil samples were analyzed for SVOCs using the USEPA SW-846 8270D analytical method. Certain reported results for the soil SVOC samples were qualified as estimated based upon instrument calibrations and field duplicate precision. The reported SVOC analytical results were 100% complete (i.e., usable) for the soil data. PARCC requirements were met.

1.3.3 Polychlorinated Biphenyls (PCBs) Analysis

Groundwater samples were analyzed for PCBs using the USEPA SW-846 8082A analytical method. The reported results for the groundwater PCB samples did not require qualification resulting from data validation. The reported PCB analytical results were 100% complete (i.e., usable) for the groundwater data. PARCC requirements were met.

Soil samples were analyzed for PCBs using the USEPA SW-846 8082A analytical method. The reported results for the soil PCB samples did not require qualification resulting from data validation. The reported PCB analytical results were 100% complete (i.e., usable) for the soil data. PARCC requirements were met.

1.3.4 Inorganic Analysis

Groundwater samples were analyzed for metals and cyanide using the USEPA SW-846 6010C/7470A/9012B analytical methods. Certain reported results for the groundwater inorganic samples were qualified as estimated based upon matrix spike recoveries and field duplicate precision. The reported inorganic analytical results were 100% complete (i.e., usable) for the groundwater data. PARCC requirements were met.

Soil samples were analyzed for metals and cyanide using the USEPA SW-846 6010C/7471B/9012B analytical methods. Certain reported results for the soil inorganic samples were qualified as estimated based upon matrix spike recoveries and serial dilutions. The reported inorganic analytical results were 100% complete (i.e., usable) for the soil data. PARCC requirements were met.

SECTION 2

DATA VALIDATION REPORT

2.1 GROUNDWATER

Data review has been completed for data packages generated by Chemtech containing analytical results from groundwater samples collected from the site. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. Analytical data were submitted in sample delivery group (SDG) F4556.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic data review. This data validation and usability report is presented by analysis type. The validated laboratory data are presented in Attachment A.

2.1.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and trip/equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All volatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile groundwater data presented by Chemtech were 100% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A.

2.1.2 Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

Custody documentation

- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank and equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of the initial and continuing calibrations, surrogate recoveries, MS/MSD precision and accuracy, and field duplicate precision as discussed below.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum average relative response factor (RRF) of 0.05 and a maximum percent relative standard deviation (%RSD) of 20% with the exception of acenaphthene (20.26%RSD), acenaphthylene (21.58%RSD), and fluorene (28.27%RSD) in the initial calibration associated with samples MW-4, MW-11, and MW-12. Therefore, the results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

All continuing calibration compounds were compliant with a minimum relative response factor (RRF) of 0.05 and a percent difference (%D) within ±20% with the exception of benzo (k)fluoranthene (25.3%D) in the continuing calibration associated with sample MW-1; and chrysene (20.8%D) in the continuing calibration associated with samples MW-3, FB103114, and FB100914. Therefore, the results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

Surrogate Recoveries

All surrogate recoveries were within lab established control limits except nitrobenzene-d5 (28%; QC limit 36-131%R) and phenol-d6 (8%; QC limit 10-130%R) in FB100914. Therefore, the results for compounds associated with these surrogates were considered estimated, possibly biased low, with positive results qualified "J-" and nondetected results qualified "UJ" for the affected sample.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent accuracy; %R) measurements were considered acceptable and within QC limits for designated spiked project samples with the exception of the MS/MSD accuracy results for 2,3,4,6-tetrachlorophenol and 1,2,4,5-tetrachlorobenzene and the MS/MSD precision results for 3,3'-dichlorobenzidine, 2,4-dinitrophenol, pentachlorophenol, and 2,3,4,6-tetrachlorophenol during

the spiked analyses of sample MW-1. Validation qualification of the unspiked sample was not required.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the 2-methylnaphthalene precision (89% RPD) associated with sample MW-1 and its field duplicate MW-11. Therefore, the results for this compound were considered estimated and qualified "J" for MW-1 and MW-11.

Usability

All semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The groundwater semivolatile data presented by Chemtech were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A.

2.1.3 Polychlorinated Biphenyls (PCBs)

The following items were reviewed for compliancy in the PCB analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and equipment blank contamination
- GC instrument performance
- Initial and continuing calibrations
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols.

Usability

All PCB sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The PCB groundwater data presented by Chemtech were 100% complete (i.e., usable). The validated PCB laboratory data are tabulated and presented in Attachment A.

2.1.4 Inorganics

The following items were reviewed for compliancy in the inorganics analysis:

- Custody documentation
- Holding times
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory preparation blank and equipment blank contamination
- ICP serial dilutions
- Initial and continuing calibration verifications
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with exception of matrix spike recoveries, blank contamination, and field duplicate precision.

Matrix Spike Recoveries

All matrix spike recoveries were considered acceptable and within the 75-125%R QC limit with the exception of the low matrix spike recoveries for barium (61%R, 59%R), iron (66%R, 71%R), selenium (68.9%R), and silver (74.9%R) associated with MW-1. Therefore, results for these analytes were considered estimated, possibly biased low, with positive results qualified "J-" and nondetected results qualified "UJ" for MW-1.

Blank Contamination

The field QC equipment blank FB100914 associated with samples collected on 10/9/14 contained aluminum and iron below the reporting limit at concentrations of 12.8 and 13 μ g/L, respectively; the field QC equipment blank FB103114 associated with samples collected on 10/31/14 contained aluminum, calcium, iron, lead, and sodium at concentrations of 30.2, 127, 57.3, 1.81, and 75.6 μ g/L, respectively. Validation qualification of the associated sample results was not required.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the precision for chromium (81%RPD) associated with sample MW-1 and its field duplicate MW-11. Therefore, the chromium results for these samples were considered estimated and qualified "J".

Usability

All inorganics sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganics

groundwater data presented by Chemtech were 100% complete (i.e., usable). The validated inorganics laboratory data are tabulated and presented in Attachment A.

2.2 SOILS

Data review has been completed for data packages generated by Chemtech containing analytical results from soil samples collected from the site. All of these samples were properly preserved, shipped under a COC record, and received intact by the analytical laboratory. Analytical data were submitted in sample delivery group (SDG) F4241.

Data validation was performed for all samples in accordance with the most current editions of the USEPA Region II SOPs for organic data review. This data validation and usability report is presented by analysis type. The validated laboratory data are presented in Attachment A.

2.2.1 Volatiles

The following items were reviewed for compliancy in the volatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and trip/equipment blank contamination
- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of the surrogate recoveries, internal standards, MS/MSD precision and accuracy, LCS recoveries, and continuing calibrations as described below.

Surrogate Recovery

All surrogate recoveries were within QC criteria for all samples with the exception of toluene-d8 (QC limit 67-123%R) in samples MW-2(5-7) (127%R) and SB-3(15-17) (129%R). Therefore, positive results associated with this surrogate were considered estimated, possibly biased high, and qualified "J+" for the affected samples.

Internal Standards

All internal standard areas were within -50% to +100% for all samples with the exception of the low ISs acenaphthene-d10 and phenanthrene-d10 in sample SB-2(39-41). This sample was reanalyzed and yielding similar results confirming the presence of matrix effects. Therefore, positive results associated with these ISs were considered estimated, possibly biased high, and

qualified "J+" whereas nondetected results were considered unusable and qualified "R" for the affected sample.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked analyses with the exception of the MS/MSD accuracy results for 1,1-dichloroethane, chloroform, tetrachloroethene, toluene, and m,p-xylenes during the spiked analyses of sample MW-4(49-51). Validation qualification of the parent sample was not required for these compounds with the exception of the nondetected result for m,p-xylenes which was considered estimated and qualified "UJ".

LCS Recoveries

All LCS recoveries were considered acceptable and within QC limits with the exception of the high LCS recovery for 1,3-dichlorobenzene (122%R; QC limit 82-120%R) associated with samples MW-2(5-7), SB-2(9-11), SB-3(15-17), and SB-3(35-37). Validation qualification was not required.

Continuing Calibrations

All continuing calibration compounds were compliant with a minimum relative response factor (RRF) of 0.05 and a percent difference (%D) within ±20% with the exception of 1,1,1-trichloroethane (23.24%D) and 1,2,4-trichlorobenzene (25.88%D) in the continuing calibration associated with samples SB-2(9-11) and SB-3(35-37); and 1,2,4-trichlorobenzene (22.24%D) and 1,2,3-trichlorobenzene (22.37%D) in the continuing calibration associated with samples MW-1(7-9), MW-4(11-13), MW-4A(11-13), MW-4(49-51), MW-3(11-13), MW-3(29-31), MW-2(5-7), MW-2(25-27), SB-1(7-9), SB-1(17-19), SB-3(15-17), and SB-2(39-41). Therefore, the results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

Usability

All volatile sample results were considered usable following data validation with the exception of certain nondetected compounds based upon low internal standard responses.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The volatile soil data presented by Chemtech were 98.6% complete (i.e., usable). The validated volatile laboratory data are tabulated and presented in Attachment A.

2.2.2 Semivolatiles

The following items were reviewed for compliancy in the semivolatile analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- MS/MSD precision and accuracy
- LCS recoveries
- Laboratory method blank and equipment blank contamination

- GC/MS instrument performance
- Initial and continuing calibrations
- Internal standard area counts and retention times
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of MS/MSD precision and accuracy, initial and continuing calibrations, and field duplicate precision as discussed below.

MS/MSD Precision and Accuracy

All MS/MSD precision (relative percent difference; RPD) and accuracy (percent recovery; %R) measurements were considered acceptable and within QC limits for designated spiked analyses with the exception of the MS/MSD precision results for 2,4-dinitrophenol, benzo(b)anthracene, and benzo(k)anthracene during the spiked analyses of sample MW-4(49-51). Validation qualification of the parent sample was not required for these compounds.

Initial and Continuing Calibrations

All initial calibration compounds were compliant with a minimum average relative response factor (RRF) of 0.05 and a maximum percent relative standard deviation (%RSD) of 20% with the exception of 2,4-dinitrophenol (40.34%RSD) in the initial calibration associated with samples MW-4(11-13), MW-4A(11-13), MW-3(11-13), MW-4(49-51), MW-1(23-25), and SB-3(35-37). Therefore, the results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

All continuing calibration compounds were compliant with a minimum relative response factor (RRF) of 0.05 and a percent difference (%D) within ±20% with the exception of 2,4-dinitrophenol (54.1%D), 4-nitrophenol (65.2%D), and 4,6-dinitro-2-methylphenol (42%D) in the continuing calibration associated with samples MW-4(49-51), MW-1(23-25), and SB-3(35-37). Therefore, the results for these compounds were considered estimated with positive results qualified "J" and nondetected results qualified "UJ" for the affected samples.

Field Duplicate Precision

All field duplicate precision results were considered acceptable with the exception of the precision for fluoranthene (90%RPD) and pyrene (91%RPD) associated with sample MW-4(11-13) and its field duplicate MW-4A(11-13). Therefore, the results for these compounds were considered estimated and qualified "J" for these samples.

Usability

All semivolatile sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The soil semivolatile data presented by Chemtech were 100% complete (i.e., usable). The validated semivolatile laboratory data are tabulated and presented in Attachment A.

2.2.3 Polychlorinated Biphenyls (PCBs)

The following items were reviewed for compliancy in the PCB analysis:

- Custody documentation
- Holding times
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory method blank and equipment blank contamination
- GC instrument performance
- Initial and continuing calibrations
- Field duplicate precision
- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of surrogate recoveries as discussed below.

Surrogate Recoveries

All surrogate recoveries were considered acceptable and within QC limits with the exception of the low tetrachloro-m-xylene recovery (QC limit 30-150%R) on the confirmation column in sample SB-2(39-41) (6%R). Validation qualification of this sample was not required.

Usability

All PCB sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The PCB soil data presented by Chemtech were 100% complete (i.e., usable). The validated PCB laboratory data are tabulated and presented in Attachment A.

2.2.4 Inorganics

The following items were reviewed for compliancy in the inorganics analysis:

- Custody documentation
- Holding times
- Matrix spike/matrix spike duplicate (MS/MSD) precision and accuracy
- Laboratory control sample (LCS) recoveries
- Laboratory preparation blank and equipment blank contamination
- ICP serial dilutions
- Initial and continuing calibration verifications
- Field duplicate precision

- Sample result verification and identification
- Quantitation limits
- Data completeness

These items were considered compliant and acceptable in accordance with the validation protocols with the exception of blank contamination, matrix spike recoveries, and serial dilutions as discussed below.

Blank Contamination

The laboratory preparation blank associated with the soil samples contained sodium below the reporting limit at a concentration of 8.56 mg/kg. Validation qualification of the soil samples was not required.

Matrix Spike Recoveries

All matrix spike recoveries were within the 75-125%R QC limit with the exception of the matrix spike recoveries for antimony (69.9%R, 68.6%R) and potassium (127%R) associated with sample MW-4(49-51%R). The nondetected antimony result was considered estimated and qualified "UJ" for this sample. The positive potassium result was considered estimated, possibly biased high, and qualified "J+" for this sample.

Serial Dilutions

All ICP serial dilution results were considered acceptable and less than 10%D with the exception of the serial dilution for manganese (13%D) associated with sample MW-4(49-51). Therefore, the manganese result was considered estimated and qualified "J" for this sample.

Usability

All inorganics sample results were considered usable following data validation.

Summary

The quality assurance objectives for measurement data included considerations for precision, accuracy, representativeness, completeness, and comparability. The inorganics soil data presented by Chemtech were 100% complete (i.e., usable). The validated inorganics laboratory data are tabulated and presented in Attachment A.

ATTACHMENT A VALIDATED LABORATORY DATA

ATTACHMENT A-1 VALIDATED LABORATORY DATA FOR GROUNDWATER SAMPLES

				Field Duplicate	1					
Con Ed - H	lunts Point	Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
Validated G	Groundwater Analytical Data	Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031	FB100914-20141031	FB103114-20141031	TB103014-20141030
October 20	14	Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
SDG: F455	SDG: F4556		CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4556	F4556	F4556	F4556	F4556	F4556	F4556	F4556
		Matrix:	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
		Sampled:	10/31/2014 11:00	10/31/2014 11:20	10/31/2014 15:10	10/31/2014 10:05	10/31/2014 13:20	10/31/2014 10:50	10/31/2014 10:40	10/30/2014 10:20
		Validated:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CAS NO.	COMPOUND	UNITS:								
	VOLATILES									
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.4 U	0.4 U	0.4 U					
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.31 U	0.31 U	0.31 U					
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/l	0.45 U	0.45 U	0.45 U					
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.38 U	0.38 U	0.38 U					
75-34-3	1,1-DICHLOROETHANE	ug/l	0.36 U	0.36 U	0.36 U					
75-35-4	1,1-DICHLOROETHENE	ug/l	0.47 U	0.47 U	0.47 U 0.2 U	0.47 U	0.47 U 0.2 U	0.47 U	0.47 U 0.2 U	0.47 U
87-61-6 120-82-1	1,2,3-TRICHLOROBENZENE 1,2,4-TRICHLOROBENZENE	ug/l	0.2 U 0.2 U	0.2 U 0.2 U	0.2 U 0.2 U					
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/l ug/l	0.2 U 0.46 U	0.2 U 0.46 U	0.2 U 0.46 U					
106-93-4	1,2-DIBROMOETHANE	ug/I ug/I	0.41 U	0.41 U	0.46 U 0.41 U	0.41 U	0.41 U	0.46 U 0.41 U	0.46 U 0.41 U	0.46 U 0.41 U
95-50-1	1,2-DIBROMOETHANE 1,2-DICHLOROBENZENE	ug/I ug/l	0.41 U 0.45 U	0.41 U 0.45 U	0.41 U					
107-06-2	1,2-DICHLOROETHANE	ug/l	0.48 U	0.48 U	0.48 U					
	M,P-XYLENE (SUM OF ISOMERS)	ug/l	0.95 U	0.95 U	0.95 U					
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.46 U	0.46 U	0.46 U					
541-73-1	1,3-DICHLOROBENZENE	ug/l	0.43 U	0.43 U	0.43 U					
106-46-7	1,4-DICHLOROBENZENE	ug/l	0.32 U	0.32 U	0.32 U					
123-91-1	1,4-DIOXANE (P-DIOXANE)	ug/l	50 U	50 U	50 U					
591-78-6	2-HEXANONE	ug/l	1.9 U	1.9 U	1.9 U					
67-64-1	ACETONE	ug/l	0.5 U	0.5 U	0.5 U					
71-43-2	BENZENE	ug/l	0.32 U	0.32 U	0.32 U					
	BROMOCHLOROMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
	BROMODICHLOROMETHANE	ug/l	0.36 U	0.36 U	0.36 U					
75-25-2	BROMOFORM	ug/l	0.47 U	0.47 U	0.47 U					
74-83-9	BROMOMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
75-15-0	CARBON DISULFIDE	ug/l	0.2 U	0.2 U	0.2 U					
56-23-5	CARBON TETRACHLORIDE	ug/l	0.2 U	0.2 U	0.2 U					
108-90-7	CHLOROBENZENE	ug/l	0.49 U	0.49 U	0.49 U					
	CHLOROETHANE	ug/l	0.2 U	0.2 U	0.2 U					
67-66-3 74-87-3	CHLOROFORM CHLOROMETHANE	ug/l	0.34 U 0.2 U	0.34 U 0.2 U	0.34 U 0.2 U					
	CIS-1,2-DICHLOROETHYLENE	ug/l	0.2 U 0.35 U	0.2 U 0.35 U	0.2 U					
	CIS-1,3-DICHLOROPROPENE	ug/l ug/l	0.31 U	0.31 U	0.33 U	0.33 U	0.31 U	0.31 U	0.33 U	0.33 U
110-82-7	CYCLOHEXANE	ug/l	0.2 U	0.51 U	0.2 U					
	DIBROMOCHLOROMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
	DICHLORODIFLUOROMETHANE	ug/l	0.2 U	0.2 U	0.2 U					
	ETHYLBENZENE	ug/l	0.2 U	0.2 U	0.2 U					
	ISOPROPYLBENZENE (CUMENE)	ug/l	0.45 U	0.45 U	0.45 U					
79-20-9	METHYL ACETATE	ug/l	0.2 U	0.2 U	0.2 U					
78-93-3	METHYL ETHYL KETONE	ug/l	1.3 U	1.3 U	1.3 U					
	METHYL ISOBUTYL KETONE	ug/l	2.1 U	2.1 U	2.1 U					
108-87-2	METHYLCYCLOHEXANE	ug/l	0.2 U	0.2 U	0.2 U					
75-09-2	METHYLENE CHLORIDE	ug/l	0.41 U	0.41 U	0.41 U					
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/l	0.43 U	0.43 U	0.43 U					
100-42-5	STYRENE	ug/l	0.36 U	0.36 U	0.36 U					
	TERT-BUTYL METHYL ETHER	ug/l	0.35 U	0.35 U	0.35 U					
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/l	0.27 U	0.27 U	0.27 U					
108-88-3	TOLUENE	ug/l	0.37 U	0.37 U	0.37 U					
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.41 U	0.41 U	0.41 U					
	TRANS-1,3-DICHLOROPROPENE	ug/l	0.29 U	0.29 U	0.29 U					
79-01-6 75-69-4	TRICHLOROETHYLENE (TCE) TRICHLOROFLUOROMETHANE	ug/l	0.28 U 0.35 U	0.28 U 0.35 U	0.28 U 0.35 U					
75-09-4 75-01-4	VINYL CHLORIDE	ug/l ug/l	0.34 U	0.34 U	0.33 U 0.34 U	0.33 U 0.34 U	0.34 U	0.35 U 0.34 U	0.33 U 0.34 U	0.35 U 0.34 U
13-01-4	VIIVE CHEORIDE	ug/1	0.34 U	U.34 U	0.34 U	0.34 U				

				Field Duplicate						
Con Ed - H		Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
	Groundwater Analytical Data	Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031	FB100914-20141031	FB103114-20141031	TB103014-20141030
October 20		Lab Sample Id:		F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
SDG: F455	56	Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG: Matrix:	F4556	F4556 GROUNDWATER	F4556 GROUNDWATER	F4556 GROUNDWATER	F4556	F4556 GROUNDWATER	F4556 GROUNDWATER	F4556 GROUNDWATER
		Matrix: Sampled:	GROUNDWATER 10/31/2014 11:00	10/31/2014 11:20	10/31/2014 15:10	10/31/2014 10:05	GROUNDWATER 10/31/2014 13:20	10/31/2014 10:50	10/31/2014 10:40	10/30/2014 10:20
		Validated:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CAS NO.	COMPOUND	UNITS:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CI ID I TO	SEMIVOLATILES	CITIE.								
95-94-3	1,2,4,5-TETRACHLOROBENZENE	ug/l	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	ug/l	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	
	2,4,5-TRICHLOROPHENOL	ug/l	0.41 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U	
	2,4,6-TRICHLOROPHENOL	ug/l	0.57 U	0.57 U	0.58 U	0.57 U	0.57 U	0.56 U	0.57 U	
	2,4-DICHLOROPHENOL	ug/l	0.67 U	0.67 U	0.68 U	0.67 U	0.67 U	0.66 U	0.67 U	
	2,4-DIMETHYLPHENOL	ug/l	0.72 U	0.72 U	0.73 U	0.72 U	0.72 U	0.71 U	0.72 U	
	2,4-DINITROPHENOL	ug/l	2.1 U	2.1 U	2.2 U	2.1 U	2.1 U	2.1 U	2.1 U	
	2,4-DINITROTOLUENE	ug/l	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	
	2,6-DINITROTOLUENE	ug/l	0.33 U	0.32 U	0.33 U	0.33 U	0.33 U	0.32 UJ	0.32 U	
	2-CHLORONAPHTHALENE	ug/l	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
	2-CHLOROPHENOL 2-METHYLNAPHTHALENE	ug/l	0.55 U 7.2 J	0.55 U 18.7 J	0.56 U 0.33 U	0.55 U 0.33 U	0.55 U 0.33 U	0.54 U 0.32 U	0.55 U 0.32 U	
	2-METHYLNAPHTHALENE 2-METHYLPHENOL (O-CRESOL)	ug/l	7.2 J 0.24 U	18.7 J 0.24 U	0.33 U 0.25 U	0.33 U 0.24 U	0.33 U 0.24 U	0.32 U 0.24 U	0.32 U 0.24 U	
	2-NITROANILINE	ug/l	0.24 U	0.49 U	0.23 U 0.51 U	0.24 U	0.24 U	0.49 U	0.24 U 0.49 U	
	2-NITROANILINE 2-NITROPHENOL	ug/l ug/l	0.53 U	0.49 U 0.53 U	0.54 U	0.53 U	0.53 U	0.49 U 0.52 U	0.49 U 0.53 U	
	3- AND 4- METHYLPHENOL (TOTAL)	ug/l	0.39 U	0.38 U	0.34 U 0.39 U	0.39 U	0.39 U	0.32 U	0.38 U	
91-94-1	3,3'-DICHLOROBENZIDINE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
99-09-2	3-NITROANILINE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/l	0.76 U	0.75 U	0.76 U	0.76 U	0.76 U	0.74 U	0.75 U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	ug/l	0.23 U	0.23 U	0.24 U	0.23 U	0.23 U	0.23 U	0.23 U	
59-50-7	4-CHLORO-3-METHYLPHENOL	ug/l	0.41 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U	
106-47-8	4-CHLOROANILINE	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/l	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 U	0.21 U	
	4-NITROANILINE	ug/l	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	
	4-NITROPHENOL	ug/l	2 U	2 U	2.1 U	2 U	2 U	2 U	2 U	
83-32-9	ACENAPHTHENE	ug/l	0.21 U	0.21 UJ	0.22 UJ	0.21 U	0.21 UJ	0.21 U	0.21 U	
208-96-8	ACENAPHTHYLENE	ug/l	0.71 U	0.71 UJ	0.72 UJ	0.71 U	0.71 UJ	0.7 U	0.71 U	
	ACETOPHENONE	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 UJ	0.14 U	
	ANTHRACENE ATRAZINE	ug/l	0.16 U 0.41 U	0.16 U	0.16 U 0.41 U	0.16 U 0.41 U	0.16 U	0.16 U	0.16 U	
	BENZALDEHYDE	ug/l	0.41 U 0.79 U	0.4 U 0.78 U	0.41 U 0.79 U	0.41 U 0.79 U	0.41 U 0.79 U	0.4 U 0.77 UJ	0.4 U 0.78 U	
	BENZO(A)ANTHRACENE	ug/l ug/l	0.79 U 0.16 U	0.78 U 0.16 U	0.16 U	0.79 U 0.16 U	0.79 U 0.16 U	0.77 UJ 0.16 U	0.78 U 0.16 U	
	BENZO(A)PYRENE	ug/l	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U	
205-99-2	BENZO(B)FLUORANTHENE	ug/l	0.3 U	0.29 U	0.3 U	0.3 U	0.3 U	0.29 U	0.29 U	
191-24-2	BENZO(G,H,I)PERYLENE	ug/l	0.3 U	0.29 U	0.3 U	0.3 U	0.3 U	0.29 U	0.29 U	
207-08-9	BENZO(K)FLUORANTHENE	ug/l	0.18 UJ	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	
	BENZYL BUTYL PHTHALATE	ug/l	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.19 U	0.19 U	
	BIPHENYL (DIPHENYL)	ug/l	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U	
	BIS(2-CHLOROETHOXY) METHANE	ug/l	0.56 U	0.56 U	0.57 U	0.56 U	0.56 U	0.55 U	0.56 U	
	BIS(2-CHLOROETHYL) ETHER	ug/l	0.56 U	0.56 U	0.57 U	0.56 U	0.56 U	0.55 U	0.56 U	
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	ug/l	0.17 U	0.17 U	0.18 U	0.17 U	0.17 U	0.17 U	0.17 U	
	BIS(2-ETHYLHEXYL) PHTHALATE	ug/l	7.9 J	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	
	CAPROLACTAM	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
86-74-8	CARBAZOLE	ug/l	0.22 U	0.22 U	0.23 U	0.22 U	0.22 U	0.22 U	0.22 U	
218-01-9	CHRYSENE DIRECTOR AND ANTHUR ACTION	ug/l	0.18 U	0.18 U	0.19 U	0.18 UJ	0.18 U	0.18 UJ	0.18 UJ	
53-70-3 132-64-9	DIBENZ(A,H)ANTHRACENE DIBENZOFURAN	ug/l ug/l	0.43 U 0.24 U	0.42 U 0.24 U	0.43 U 0.25 U	0.43 U 0.24 U	0.43 U 0.24 U	0.42 U 0.24 U	0.42 U 0.24 U	
84-66-2	DIETHYL PHTHALATE	ug/l ug/l	0.24 U 0.39 U	0.24 U 0.38 U	0.25 U 0.39 U	0.24 U 0.39 U	0.24 U 0.39 U	0.24 U 0.38 U	0.24 U 0.38 U	
131-11-3	DIMETHYL PHTHALATE	ug/l	0.39 U 0.22 U	0.38 U 0.22 U	0.23 U	0.39 U 0.22 U	0.39 U 0.22 U	0.38 U 0.22 U	0.38 U 0.22 U	
84-74-2	DI-N-BUTYL PHTHALATE	ug/l	0.22 U	0.22 U	0.23 U	0.22 U	0.22 U 1 U	0.22 U	0.22 U	
	DI-N-OCTYLPHTHALATE	ug/l	0.52 U	0.52 U	0.53 U	0.52 U	0.52 U	0.51 U	0.52 U	
	FLUORANTHENE	ug/l	0.41 U	0.4 U	0.41 U	0.41 U	0.41 U	0.4 U	0.4 U	
86-73-7	FLUORENE	ug/l	0.32 U	0.31 UJ	0.32 UJ	0.32 U	0.32 UJ	0.31 U	0.31 U	
118-74-1	HEXACHLOROBENZENE	ug/l	0.18 U	0.18 U	0.19 U	0.18 U	0.18 U	0.18 U	0.18 U	
87-68-3	HEXACHLOROBUTADIENE	ug/l	0.26 U	0.25 U	0.26 U	0.26 U	0.26 U	0.25 U	0.25 U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	ug/l	0.24 U	0.24 U	0.25 U	0.24 U	0.24 U	0.24 U	0.24 U	
/ / /										

			Field Duplicate						
Con Ed - Hunts Point	Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
Validated Groundwater Analytical Data	Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031	FB100914-20141031	FB103114-20141031	TB103014-20141030
October 2014	Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
SDG: F4556	Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
	SDG:	F4556	F4556	F4556	F4556	F4556	F4556	F4556	F4556
	Matrix:	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER	GROUNDWATER
	Sampled:	10/31/2014 11:00	10/31/2014 11:20	10/31/2014 15:10	10/31/2014 10:05	10/31/2014 13:20	10/31/2014 10:50	10/31/2014 10:40	10/30/2014 10:20
	Validated:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CAS NO. COMPOUND	UNITS:								
193-39-5 INDENO(1,2,3-C,D)PYRENE	ug/l	0.15 U	0.15 U						
78-59-1 ISOPHORONE	ug/l	0.31 U	0.3 U	0.31 U	0.31 U	0.31 U	0.3 U	0.3 U	
91-20-3 NAPHTHALENE	ug/l	0.12 U	0.12 U						
98-95-3 NITROBENZENE	ug/l	0.69 U	0.69 U	0.7 U	0.69 U	0.69 U	0.68 UJ	0.69 U	
621-64-7 N-NITROSODI-N-PROPYLAMINE	ug/l	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 UJ	0.2 U	
86-30-6 N-NITROSODIPHENYLAMINE	ug/l	0.61 U	0.61 U	0.62 U	0.61 U	0.61 U	0.6 UJ	0.61 U	
87-86-5 PENTACHLOROPHENOL	ug/l	1 U	1 U	1 U	1 U	1 U	1 U	1 U	
85-01-8 PHENANTHRENE	ug/l	0.27 U	4.3 J	0.27 U	0.27 U	3.1 J	0.26 U	0.26 U	
108-95-2 PHENOL	ug/l	0.21 U	0.21 U	0.22 U	0.21 U	0.21 U	0.21 UJ	0.21 U	
129-00-0 PYRENE	ug/l	0.2 U	0.2 U	0.21 U	0.2 U	0.2 U	0.2 U	0.2 U	

				Field Duplicate						
Con Ed - H		Location ID:	MW-1	MW-1	MW-2	MW-3	MW-4	FIELDQC	FIELDQC	FIELDQC
	roundwater Analytical Data	Sample ID:	MW-1-20141031	MW-11-20141031	MW-2-20141031	MW-3-20141031	MW-4-20141031	FB100914-20141031	FB103114-20141031	TB103014-20141030
October 20		Lab Sample Id:	F4556-01	F4556-04	F4556-11	F4556-07	F4556-05	F4556-09	F4556-08	F4556-10
SDG: F455		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4556 GROUNDWATER	F4556	F4556	F4556	F4556 GROUNDWATER	F4556	F4556	F4556 GROUNDWATER
		Matrix: Sampled:	10/31/2014 11:00	GROUNDWATER 10/31/2014 11:20	GROUNDWATER 10/31/2014 15:10	GROUNDWATER 10/31/2014 10:05	10/31/2014 13:20	GROUNDWATER 10/31/2014 10:50	GROUNDWATER 10/31/2014 10:40	10/30/2014 10:20
		Validated:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
CAS NO.	COMPOUND	UNITS:	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014	11/24/2014
	PCBS									
12674-11-2	PCB-1016 (AROCLOR 1016)	ug/l	0.098 U	0.099 U	0.098 U	0.097 U	0.097 U	0.097 U	0.097 U	
	PCB-1221 (AROCLOR 1221)	ug/l	0.102 U	0.103 U	0.102 U	0.101 U	0.101 U	0.101 U	0.101 U	
	PCB-1232 (AROCLOR 1232)	ug/l	0.102 U	0.103 U	0.102 U	0.101 U	0.101 U	0.101 U	0.101 U	
	PCB-1242 (AROCLOR 1242)	ug/l	0.091 U	0.092 U	0.091 U	0.09 U	0.09 U	0.09 U	0.09 U	
	PCB-1248 (AROCLOR 1248)	ug/l	0.102 U	0.103 U	0.102 U	0.101 U	0.101 U	0.101 U	0.101 U	
	PCB-1254 (AROCLOR 1254) PCB-1260 (AROCLOR 1260)	ug/l	0.045 U 0.083 U	0.045 U 0.084 U	0.045 U 0.083 U	0.044 U 0.082 U	0.044 U 0.082 U	0.044 U 0.082 U	0.044 U 0.082 U	
11096-82-3	INORGANICS	ug/l	0.083 U	0.084 U	0.083 U	0.082 U	0.082 U	0.082 U	0.082 U	
7429-90-5	ALUMINUM	ug/l	156	219	13300	59.1	1970	12.8 J	30.2 J	
	ANTIMONY	ug/l	6.25 U	6.25 U	6.25 U	6.25 U	6.25 U	6.25 U	6.25 U	
7440-38-2		ug/l	4.34 J	4.7 J	7.34 J	3.09 J	3.44 J	2.5 U	2.5 U	
7440-39-3		ug/l	301 J-	294	266	53.9	555	4 U	4 U	
	BERYLLIUM	ug/l	0.7 U	0.7 U	0.72 J	0.7 U	0.7 U	0.7 U	0.7 U	
	CADMIUM	ug/l	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
	CALCIUM	ug/l	121200	119900	95000	153100	604600	31.8 U	127 J	
	CHROMIUM, TOTAL	ug/l	4.44 J	10.48 J	35.2	1.1 U	4.91 J	1.1 U	1.1 U	
7440-48-4		ug/l	3.75 U	3.75 U	11.9 J	3.75 U	6.07 J	3.75 U	3.75 U	
7440-50-8		ug/l	2 U	2.45 J	35.6	8.12 J	9.7 J	2 U	2 U	
7439-89-6 7439-92-1		ug/l	3280 J- 6.31	3400 5.97 J	16700	148 1.85 J	6300	13 J 1.5 U	57.3 1.81 J	
	MAGNESIUM	ug/l ug/l	12600	12600	151 43000	553000	11.2 180900	32.5 U	32.5 U	
	MANGANESE	ug/l	1270	1250	1120	13.5	8260	1.7 U	1.7 U	
	MERCURY	ug/l	0.1 U	0.1 U	0.589	0.1 U	0.1 U	0.1 U	0.1 U	
7440-02-0		ug/l	4.2 U	4.2 U	34.3	4.2 U	6.98 J	4.2 U	4.2 U	
7440-09-7	POTASSIUM	ug/l	13700	13800	37600	213400	186400	38.8 U	38.8 U	
	SELENIUM	ug/l	4.8 UJ	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	4.8 U	
7440-22-4		ug/l	1.25 UJ	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	1.25 U	
7440-23-5		ug/l	459800	457300	2895100	13.9 U	23762000	13.9 U	75.6 J	
	THALLIUM	ug/l	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	2.4 U	
7440-62-2	VANADIUM ZING	ug/l	5 U 6.79 J	5 U	28.5	5 U	5 U 7.59 J	5 U 5 U	5 U 5 U	
57-12-5	CYANIDE	ug/l ug/l	6.79 J 11	8.35 J 12	130 235	5 U 11	7.59 J 132	3 U	3 U	
37 12 3	DISSOLVED METALS	ug/1	- 11	12	255	- 11	132	3.0	3.0	
7429-90-5	ALUMINUM	ug/l			52					
	ANTIMONY	ug/l			6.25 U					
7440-38-2		ug/l			7.19 J					
7440-39-3		ug/l			161					
	BERYLLIUM	ug/l			0.7 U					
	CADMIUM	ug/l			0.5 U					
	CALCIUM CUROMUM TOTAL	ug/l			111300					
7440-47-3 7440-48-4	CHROMIUM, TOTAL	ug/l			1.1 U 3.75 U					
7440-48-4		ug/l ug/l			3.75 U 10.75					
7439-89-6		ug/I ug/I			10.75					
7439-92-1		ug/l			4.78 J					
	MAGNESIUM	ug/l			46100					
7439-96-5	MANGANESE	ug/l			1120					
	MERCURY	ug/l			0.1 U					
7440-02-0		ug/l			13.2 J					
	POTASSIUM	ug/l			39300					
	SELENIUM	ug/l			4.8 U					
7440-22-4 7440-23-5		ug/l			1.25 U 13.9 U					
	THALLIUM	ug/l ug/l			13.9 U 2.4 U					
	VANADIUM	ug/I ug/I			2.4 U 5 U					
7440-66-6		ug/l			13.3 J					
					20.0					

ATTACHMENT A-2 VALIDATED LABORATORY DATA FOR SOIL SAMPLES

Con Ed - Hur	its Point	Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
Validated Soi	l Analytical Data	Sample ID:	MW-1(7-9)-20141001	MW-1(23-25)-20141001	MW-2(5-7)-20141006	MW-2(25-27)-20141007	MW-3(11-13)-20141003	MW-3(29-31)-20141006
October 2014		Lab Sample Id:	F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09
SDG: F4241		Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/1/2014 9:58	10/1/2014 11:25	10/6/2014 14:48	10/7/2014 9:50	10/3/2014 14:20	10/6/2014 9:45
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
	VOLATILES							
71-55-6	1,1,1-TRICHLOROETHANE	ug/kg	0.55 U	4.3 J	0.57 U	0.59 U	0.56 U	0.65 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/kg	0.51 U	0.52 U	0.52 U	0.54 U	0.51 U	0.6 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE		0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/kg	0.99 U	1 U	1 U	1.1 U	1 U	1.2 U
75-34-3	1,1-DICHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-35-4 87-61-6	1,1-DICHLOROETHENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U 0.59 UJ	0.56 U 0.56 UJ	0.65 U 0.65 UJ
120-82-1	1,2,3-TRICHLOROBENZENE	ug/kg	0.55 UJ 0.55 UJ	0.56 U 0.56 U	0.57 UJ 0.57 UJ	0.59 UJ 0.59 UJ	0.56 UJ 0.56 UJ	0.65 UJ 0.65 UJ
96-12-8	1,2,4-TRICHLOROBENZENE	ug/kg	0.96 U		0.57 UJ 0.99 U	0.59 UJ 1 U		
96-12-8 106-93-4	1,2-DIBROMO-3-CHLOROPROPANE 1,2-DIBROMOETHANE	ug/kg ug/kg	0.96 U 0.55 U	0.98 U 0.56 U	0.99 U 0.57 U	0.59 U	0.97 U 0.56 U	1.1 U 0.65 U
95-50-1	1,2-DICHLOROBENZENE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
107-06-2	1,2-DICHLOROBENZENE 1,2-DICHLOROETHANE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	ug/kg ug/kg	0.79 U	0.81 U	0.82 U	0.84 U	0.81 U	0.93 U
78-87-5	1,2-DICHLOROPROPANE	ug/kg	0.29 U	0.29 U	0.3 U	0.3 U	0.29 U	0.34 U
541-73-1	1,3-DICHLOROBENZENE	ug/kg	0.41 U	0.42 U	0.42 U	0.43 U	0.41 U	0.48 U
106-46-7	1,4-DICHLOROBENZENE	ug/kg	0.45 U	0.46 U	0.47 U	0.48 U	0.46 U	0.53 U
123-91-1	1,4-DIOXANE (P-DIOXANE)	ug/kg	110 U	110 U	110 U	120 U	110 U	130 U
591-78-6	2-HEXANONE	ug/kg	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	3.2 U
67-64-1	ACETONE	ug/kg	37.1	13 J	18.1 J	27.5 J	18.5 J	100
71-43-2	BENZENE	ug/kg	0.42 U	0.43 U	0.43 U	0.44 U	0.42 U	0.49 U
74-97-5	BROMOCHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-27-4	BROMODICHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-25-2	BROMOFORM	ug/kg	0.82 U	0.83 U	0.84 U	0.87 U	0.83 U	0.96 U
74-83-9	BROMOMETHANE	ug/kg	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U
75-15-0	CARBON DISULFIDE	ug/kg	3.5 J	0.56 U	0.57 U	3.9 J	0.56 U	5.5 J
56-23-5	CARBON TETRACHLORIDE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
108-90-7	CHLOROBENZENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-00-3	CHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
67-66-3 74-87-3	CHLOROFORM CHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U 0.57 U	0.59 U 0.59 U	0.56 U 0.56 U	0.65 U 0.65 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/kg ug/kg	0.55 U 0.55 U	0.56 U 0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
110-82-7	CYCLOHEXANE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
124-48-1	DIBROMOCHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
100-41-4	ETHYLBENZENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
98-82-8	ISOPROPYLBENZENE (CUMENE)	ug/kg	0.53 U	0.54 U	0.55 U	0.56 U	0.54 U	0.62 U
79-20-9	METHYL ACETATE	ug/kg	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U	1.3 U
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	ug/kg	3.4 U	3.5 U	3.5 U	3.6 U	3.5 U	18.6 J
108-10-1	METHYL ISOBUTYL KETONE	ug/kg	2.8 U	2.8 U	2.9 U	2.9 U	2.8 U	3.2 U
108-87-2	METHYLCYCLOHEXANE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-09-2	METHYLENE CHLORIDE	ug/kg	3.5 J	4.1 J	4.2 J	5.4 J	4.9 J	5.2 J
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
100-42-5	STYRENE	ug/kg	0.5 U	0.51 U	0.51 U	0.53 U	0.5 U	0.58 U
1634-04-4	TERT-BUTYL METHYL ETHER	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
108-88-3	TOLUENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/kg	0.55 U	0.56 U	0.57 U	0.59 U	0.56 U	0.65 U
75-69-4 75-01-4	TRICHLOROFLUOROMETHANE VINYL CHLORIDE	ug/kg ug/kg	0.55 U 0.55 U	0.56 U 0.56 U	0.57 U 0.57 U	0.59 U 0.59 U	0.56 U 0.56 U	0.65 U 0.65 U
13-01-4	VIIVE CHEOKIDE	ug/Kg	U.33 U	U.30 U	U.37 U	U.39 U	U.30 U	U.03 U

Con Ed - Hunt	s Point	Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
	Analytical Data	Sample ID:	MW-1(7-9)-20141001	MW-1(23-25)-20141001	MW-2(5-7)-20141006	MW-2(25-27)-20141007	MW-3(11-13)-20141003	MW-3(29-31)-20141006
October 2014	•	Lab Sample Id:	F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09
SDG: F4241		Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/1/2014 9:58	10/1/2014 11:25	10/6/2014 14:48	10/7/2014 9:50	10/3/2014 14:20	10/6/2014 9:45
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
	SEMIVOLATILES							
95-94-3	1,2,4,5-TETRACHLOROBENZENE	ug/kg	72.3 U	14.7 U	29.8 U	15.3 U	14.6 U	17 U
58-90-2	2,3,4,6-TETRACHLOROPHENOL	ug/kg	72.3 U	14.7 U	29.8 U	15.3 U	14.6 U	17 U
95-95-4	2,4,5-TRICHLOROPHENOL	ug/kg	130 U	26.2 U	53.2 U	27.4 U	26 U	30.4 U
88-06-2 120-83-2	2,4,6-TRICHLOROPHENOL	ug/kg	56.3 U	11.4 U	23.2 U	11.9 U	11.4 U	13.3 U
120-83-2	2,4-DICHLOROPHENOL 2,4-DIMETHYLPHENOL	ug/kg	70.1 U 100 U	14.2 U 21.1 U	28.9 U 43 U	14.8 U 22.1 U	14.1 U 21 U	16.5 U 24.6 U
51-28-5	2,4-DINITROPHENOL	ug/kg	100 U 190 U	37.9 UJ	77.1 U	39.6 U	37.7 UJ	44.1 U
121-14-2	2,4-DINITROPHENOL 2,4-DINITROTOLUENE	ug/kg ug/kg	55.2 U	11.2 U	22.7 U	11.7 U	11.1 U	13 U
606-20-2	2,6-DINITROTOLUENE	ug/kg ug/kg	75.1 U	15.2 U	30.9 U	15.9 U	15.1 U	17.7 U
91-58-7	2-CHLORONAPHTHALENE	ug/kg ug/kg	42 U	8.5 U	17.3 U	8.9 U	8.5 U	9.9 U
95-57-8	2-CHLOROPHENOL	ug/kg ug/kg	97.2 U	19.7 U	40 U	20.6 U	19.6 U	22.9 U
91-57-6	2-METHYLNAPHTHALENE	ug/kg	46.4 U	9.4 U	19.1 U	9.8 U	9.4 U	10.9 U
95-48-7	2-METHYLPHENOL (O-CRESOL)	ug/kg	99.9 U	20.3 U	41.2 U	21.2 U	20.1 U	23.5 U
88-74-4	2-NITROANILINE	ug/kg	81.7 U	16.6 U	33.7 U	17.3 U	16.5 U	19.2 U
88-75-5	2-NITROPHENOL	ug/kg	88.9 U	18 U	36.6 U	18.8 U	17.9 U	20.9 U
МЕРН3МЕРН	3- AND 4- METHYLPHENOL (TOTAL)	ug/kg	95.5 U	19.4 U	39.3 U	20.2 U	19.3 U	22.5 U
91-94-1	3,3'-DICHLOROBENZIDINE	ug/kg	120 U	23.9 U	48.7 U	25 U	23.8 U	27.8 U
99-09-2	3-NITROANILINE	ug/kg	120 U	23.9 U	48.7 U	25 U	23.8 U	27.8 U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/kg	110 U	21.4 UJ	43.4 U	22.3 U	21.3 U	24.8 U
101-55-3	4-BROMOPHENYL PHENYL ETHER	ug/kg	35.9 U	7.3 U	14.8 U	7.6 U	7.2 U	8.5 U
59-50-7	4-CHLORO-3-METHYLPHENOL	ug/kg	81.7 U	16.6 U	33.7 U	17.3 U	16.5 U	19.2 U
106-47-8	4-CHLOROANILINE	ug/kg	130 U	26.3 U	53.4 U	27.5 U	26.2 U	30.6 U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/kg	99.9 U	20.3 U	41.2 U	21.2 U	20.1 U	23.5 U
100-01-6	4-NITROANILINE	ug/kg	240 U	48.6 U	98.7 U	50.7 U	48.3 U	56.4 U
100-02-7	4-NITROPHENOL	ug/kg	340 U	69.3 UJ	140 U	72.4 U	68.9 U	80.5 U
83-32-9	ACENAPHTHENE	ug/kg	51.9 U	10.5 U	21.4 U	11 U	10.5 U	12.2 U
208-96-8 98-86-2	ACENAPHTHYLENE	ug/kg	46.4 U 56.3 U	9.4 U 11.4 U	19.1 U 23.2 U	9.8 U 11.9 U	9.4 U 11.4 U	10.9 U 13.3 U
120-12-7	ACETOPHENONE ANTHRACENE	ug/kg	37.5 U	7.6 U	23.2 U 15.5 U	7.9 U	7.6 U	8.8 U
1912-24-9	ATRAZINE	ug/kg ug/kg	97.2 U	19.7 U	40 U	20.6 U	19.6 U	22.9 U
100-52-7	BENZALDEHYDE	ug/kg	96.1 U	19.5 U	39.6 U	20.3 U	19.4 U	22.6 U
56-55-3	BENZO(A)ANTHRACENE	ug/kg	520 J	17.8 U	36.2 U	160 J	17.7 U	20.7 U
50-32-8	BENZO(A)PYRENE	ug/kg	410 J	8.1 U	16.4 U	130 J	8 U	9.4 U
205-99-2	BENZO(B)FLUORANTHENE	ug/kg	560 J	12.2 U	24.8 U	150 J	12.1 U	14.2 U
191-24-2	BENZO(G,H,I)PERYLENE	ug/kg	74.5 U	15.1 U	30.7 U	150 J	15 U	17.6 U
207-08-9	BENZO(K)FLUORANTHENE	ug/kg	86.7 U	17.6 U	35.7 U	92.4 J	17.5 U	20.4 U
85-68-7	BENZYL BUTYL PHTHALATE	ug/kg	88.3 U	17.9 U	36.4 U	18.7 U	17.8 U	20.8 U
92-52-4	BIPHENYL (DIPHENYL)	ug/kg	69.6 U	14.1 U	28.6 U	14.7 U	14 U	16.4 U
111-91-1	BIS(2-CHLOROETHOXY) METHANE	ug/kg	110 U	21.5 U	43.7 U	22.4 U	21.4 U	25 U
111-44-4	BIS(2-CHLOROETHYL) ETHER	ug/kg	88.3 U	17.9 U	36.4 U	18.7 U	17.8 U	20.8 U
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	ug/kg	76.2 U	15.4 U	31.4 U	16.1 U	15.4 U	17.9 U
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	ug/kg	2600	190 J	26.8 U	110 J	280 J	95.4 J
105-60-2	CAPROLACTAM	ug/kg	85.6 U	17.3 U	35.2 U	18.1 U	17.3 U	20.2 U
86-74-8	CARBAZOLE	ug/kg	40.3 U	8.2 U	16.6 U	8.5 U	8.1 U	9.5 U
218-01-9	CHRYSENE DIDENTAL HEADTH A CENT	ug/kg	410 J	16.9 U	34.3 U	170 J	16.8 U	19.6 U
53-70-3	DIBENZ(A,H)ANTHRACENE	ug/kg	53 U	10.7 U	21.8 U	11.2 U	10.7 U	12.5 U
132-64-9 84-66-2	DIBENZOFURAN DIETHYL PHTHALATE	ug/kg	71.8 U 28.7 U	14.5 U 5.8 U	29.6 U 11.8 U	15.2 U 6.1 U	14.5 U 5.8 U	16.9 U 6.8 U
131-11-3	DIMETHYL PHTHALATE	ug/kg	28.7 U 610 J	3.8 U 350 J	530 J	500	5.8 U 400	6.8 U 410 J
84-74-2	DI-N-BUTYL PHTHALATE	ug/kg	140 U	29.3 U	530 J 59.6 U	30.6 U	400 29.2 U	34.1 U
84-74-2 117-84-0	DI-N-BUTYL PHTHALATE DI-N-OCTYLPHTHALATE	ug/kg ug/kg	140 U 21 U	29.3 U 4.3 U	39.6 U 8.6 U	30.6 U 4.4 U	29.2 U 4.2 U	34.1 U 4.9 U
206-44-0	FLUORANTHENE	ug/kg ug/kg	820 J	7.5 U	170 J	250 J	7.5 U	4.9 U 8.7 U
200-TT-U	LECORMITHEME	ug/Ag	02U J	1.5 0	1/U J	43U J	1.5 U	0.7 U

Con Ed - Hunt	s Point	Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
Validated Soil	Analytical Data	Sample ID:	MW-1(7-9)-20141001	MW-1(23-25)-20141001	MW-2(5-7)-20141006	MW-2(25-27)-20141007	MW-3(11-13)-20141003	MW-3(29-31)-20141006
October 2014	October 2014		F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09
SDG: F4241		Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/1/2014 9:58	10/1/2014 11:25	10/6/2014 14:48	10/7/2014 9:50	10/3/2014 14:20	10/6/2014 9:45
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
86-73-7	FLUORENE	ug/kg	69.6 U	14.1 U	28.6 U	14.7 U	14 U	16.4 U
118-74-1	HEXACHLOROBENZENE	ug/kg	75.1 U	15.2 U	30.9 U	15.9 U	15.1 U	17.7 U
87-68-3	HEXACHLOROBUTADIENE	ug/kg	66.8 U	13.5 U	27.5 U	14.1 U	13.5 U	15.7 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	ug/kg	44.7 U	9.1 U	18.4 U	9.5 U	9 U	10.5 U
67-72-1	HEXACHLOROETHANE	ug/kg	82.3 U	16.7 U	33.9 U	17.4 U	16.6 U	19.4 U
193-39-5	INDENO(1,2,3-C,D)PYRENE	ug/kg	61.3 U	12.4 U	25.2 U	120 J	12.4 U	14.4 U
78-59-1	ISOPHORONE	ug/kg	60.7 U	12.3 U	25 U	12.9 U	12.2 U	14.3 U
91-20-3	NAPHTHALENE	ug/kg	63.5 U	12.9 U	26.1 U	13.4 U	12.8 U	15 U
98-95-3	NITROBENZENE	ug/kg	69.6 U	14.1 U	28.6 U	14.7 U	14 U	16.4 U
621-64-7	N-NITROSODI-N-PROPYLAMINE	ug/kg	92.8 U	18.8 U	38.2 U	19.6 U	18.7 U	21.8 U
86-30-6	N-NITROSODIPHENYLAMINE	ug/kg	44.2 U	9 U	18.2 U	9.4 U	8.9 U	10.4 U
87-86-5	PENTACHLOROPHENOL	ug/kg	130 U	25.5 U	51.8 U	26.7 U	25.4 U	29.6 U
85-01-8	PHENANTHRENE	ug/kg	520 J	10.1 U	20.5 U	180 J	10 U	11.7 U
108-95-2	PHENOL	ug/kg	42.5 U	8.6 U	17.5 U	79.5 J	8.6 U	10 U
129-00-0	PYRENE	ug/kg	710 J	9 U	190 J	230 J	8.9 U	10.4 U

Con Ed - Hunt	De int	Location ID:	MW-1	MW-1	MW-2	MW-2	MW-3	MW-3
	Analytical Data	Sample ID:	MW-1(7-9)-20141001	MW-1(23-25)-20141001	MW-2(5-7)-20141006	MW-2(25-27)-20141007	MW-3(11-13)-20141003	
October 2014	Alialytical Data	Lab Sample Id:	F4241-01	F4241-02	F4241-10	F4241-11	F4241-08	F4241-09
SDG: F4241		Depth:	7 - 9 ft	23 - 25 ft	5 - 7 ft	25 - 27 ft	11 - 13 ft	29 - 31 ft
SDG: F4241		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
			F4241	F4241	F4241	F4241	F4241	F4241
		SDG: Matrix:	F4241 SOIL	F4241 SOIL	F4241 SOIL	F4241 SOIL	F4241 SOIL	F4241 SOIL
			10.00					
		Sampled:	10/1/2014 9:58	10/1/2014 11:25	10/6/2014 14:48	10/7/2014 9:50	10/3/2014 14:20	10/6/2014 9:45
CAS NO.	COMPOUND	Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	PCBS	UNITS:						
12674-11-2	PCB-1016 (AROCLOR 1016)	/!	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
11104-28-2	PCB-1016 (AROCLOR 1016) PCB-1221 (AROCLOR 1221)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U 3.7 U	4.3 U 4.3 U
11104-28-2		ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U 4.3 U
53469-21-9	PCB-1232 (AROCLOR 1232) PCB-1242 (AROCLOR 1242)	ug/kg ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U 4.3 U
12672-29-6	PCB-1242 (AROCLOR 1242) PCB-1248 (AROCLOR 1248)		3.7 U	3.7 U	3.8 U	3.9 U	3.7 U 3.7 U	4.3 U 4.3 U
11097-69-1	PCB-1248 (AROCLOR 1248) PCB-1254 (AROCLOR 1254)	ug/kg	3.7 U 1.6 U	3.7 U 1.7 U	3.8 U 1.7 U	3.9 U 1.7 U	3.7 U 1.7 U	4.3 U 1.9 U
11097-69-1		ug/kg ug/kg	1.6 U 88	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
11090-82-3	PCB-1260 (AROCLOR 1260) INORGANICS	ug/kg	88	3.7 U	3.8 U	3.9 U	3.7 U	4.3 U
7429-90-5	ALUMINUM		6130	7320	6730	9300	1420	6030
7440-36-0	ANTIMONY	mg/kg		0.522 U	0.537 J	0.607 J	0.505 U	0.594 U
7440-36-0	ARSENIC	mg/kg	0.524 U	0.522 U 1.32				
7440-38-2	BARIUM	mg/kg	3.07 178	75.2	3.29 73.8	3.02	3.47 18.1	5.49 44.3
		mg/kg				92		
7440-41-7	BERYLLIUM	mg/kg	0.404 0.056 U	0.381	0.442	0.496 0.058 U	0.142 J 0.054 U	0.426
7440-43-9	CADMIUM	mg/kg		0.056 U	0.056 U			0.064 U
7440-70-2	CALCIUM	mg/kg	17600	1800	35200	2680	14900	5330
7440-47-3	CHROMIUM, TOTAL	mg/kg	22.3	20.9	15.5	20.9	8.65	18.1
7440-48-4	COBALT	mg/kg	7.93	11.9	7.58	11.5	1.65	5.89
7440-50-8	COPPER	mg/kg	20	18.5	16.6	17.5	8.8	18.6
7439-89-6	IRON	mg/kg	15400	20000	16700	23500	5560	17600
7439-92-1	LEAD	mg/kg	112	4.17	87.8	35	41	63.2
7439-95-4	MAGNESIUM	mg/kg	6970	3780	18900	4770	5870	4280
7439-96-5	MANGANESE	mg/kg	201	170	227	233	64.8	304
7439-97-6	MERCURY	mg/kg	1.41	0.005 U	0.175	0.053	0.038	0.145
7440-02-0	NICKEL POTA SCHIM	mg/kg	38.5	17.9	14.4	17.3	3.38	14
7440-09-7	POTASSIUM	mg/kg	1760	4280	1870	3800	337	1480
7782-49-2	SELENIUM	mg/kg	0.234 U	0.51 J	0.347 J	0.594 J	0.225 U	0.743 J
7440-22-4	SILVER	mg/kg	1.07	1.1	1.12	1.52	0.296 J	1.61
7440-23-5	SODIUM	mg/kg	765	952	911	2330	1120	11900
7440-28-0	THALLIUM	mg/kg	0.253 U	0.251 U	0.253 U	0.259 U	0.243 U	0.287 U
7440-62-2	VANADIUM	mg/kg	20.9	32	22.8	28.8	6.87	18.8
7440-66-6	ZINC	mg/kg	155	43.9	81.9	72.3	28.8	105
57-12-5	CYANIDE	mg/kg	1.86	0.034 U	0.194 J	0.238 J	0.221 J	0.056 J

				Field Duplicate of MW-4	•			
Con Ed - Hunt	ts Point	Location ID:	MW-4	MW-4A	MW-4	SB-1	SB-1	SB-2
Validated Soil	Analytical Data	Sample ID:	MW-4(11-13)-20141002	MW-4A(11-13)-20141002	MW-4(49-51)-20141003	SB-1(7-9)-20141007	SB-1(17-19)-20141007	SB-2(9-11)-20141008
October 2014		Lab Sample Id:	F4241-03	F4241-04	F4241-05	F4241-12	F4241-13	F4241-14
SDG: F4241		Depth:	11 - 13 ft	11 - 13 ft	49 - 51 ft	7 - 9 ft	17 - 19 ft	9 - 11 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/2/2014 10:05	10/2/2014 10:15	10/3/2014 8:30	10/7/2014 13:47	10/7/2014 14:15	10/8/2014 11:25
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:	1					
	VOLATILES							
71-55-6	1,1,1-TRICHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 UJ
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/kg	0.51 U	0.51 U	0.53 U	0.53 U	0.58 U	0.53 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/kg	0.99 U	1 U	1 U	1 U	1.1 U	1 U
75-34-3	1,1-DICHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-35-4	1,1-DICHLOROETHENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
87-61-6	1,2,3-TRICHLOROBENZENE	ug/kg	0.55 UJ	0.56 UJ	0.57 UJ	0.58 UJ	0.63 UJ	0.57 U
120-82-1	1,2,4-TRICHLOROBENZENE	ug/kg	0.55 UJ	0.56 UJ	0.57 UJ	0.58 UJ	0.63 UJ	0.57 UJ
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	ug/kg	0.96 U	0.97 U	1 U	1 U	1.1 U	1 U
106-93-4	1,2-DIBROMOETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
95-50-1	1,2-DICHLOROBENZENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
107-06-2	1,2-DICHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	ug/kg	0.79 U	0.8 U	0.82 UJ	0.84 U	0.91 U	0.82 U
78-87-5	1,2-DICHLOROPROPANE	ug/kg	0.29 U	0.29 U	0.3 U	0.3 U	0.33 U	0.3 U
541-73-1	1,3-DICHLOROBENZENE	ug/kg	0.41 U	0.41 U	0.42 U	0.43 U	0.47 U	0.42 U
106-46-7	1,4-DICHLOROBENZENE	ug/kg	0.45 U	0.46 U	0.47 U	0.48 U	0.52 U	0.47 U
123-91-1	1,4-DIOXANE (P-DIOXANE)	ug/kg	110 U	110 U	110 U	120 U	130 U	110 U
591-78-6	2-HEXANONE	ug/kg	2.8 U	2.8 U	2.9 U	2.9 U	3.2 U	2.9 U
67-64-1	ACETONE	ug/kg	18.1 J	24 J	15 J	8.6 J	42.7	16.2 J
71-43-2	BENZENE	ug/kg	0.42 U	0.42 U	0.44 U	0.44 U	0.48 U	0.44 U
74-97-5	BROMOCHLOROMETHANE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-27-4	BROMODICHLOROMETHANE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-25-2	BROMOFORM	ug/kg ug/kg	0.82 U	0.82 U	0.85 U	0.86 U	0.93 U	0.85 U
74-83-9	BROMOMETHANE	ug/kg ug/kg	1.1 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U
75-15-0	CARBON DISULFIDE	ug/kg ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	6.5	0.57 U
56-23-5	CARBON TETRACHLORIDE		0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
108-90-7	CHLOROBENZENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-00-3	CHLOROETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
67-66-3		ug/kg						
	CHLOROFORM CHLOROMETHANE	ug/kg	0.55 U 0.55 U	0.56 U 0.56 U	0.57 U 0.57 U	0.58 U 0.58 U	0.63 U 0.63 U	0.57 U 0.57 U
74-87-3 156-59-2		ug/kg	0.55 U	0.56 U	0.57 U 0.57 U	0.58 U	0.63 U	0.57 U
10061-01-5	CIS-1,2-DICHLOROETHYLENE CIS-1,3-DICHLOROPROPENE	ug/kg				0.58 U		0.57 U
110-82-7	CYCLOHEXANE	ug/kg	0.55 U 0.55 U	0.56 U 0.56 U	0.57 U 0.57 U	0.58 U	0.63 U 0.63 U	0.57 U
		ug/kg						
124-48-1	DIBROMOCHLOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
100-41-4	ETHYLBENZENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
98-82-8	ISOPROPYLBENZENE (CUMENE)	ug/kg	0.53 U	0.53 U	0.55 U	0.56 U	0.61 U	0.55 U
79-20-9	METHYL ACETATE	ug/kg	1.1 U	1.1 U	1.1 U	1.2 U	1.3 U	1.1 U
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	ug/kg	3.4 U	3.5 U	3.6 U	3.6 U	3.9 U	3.6 U
108-10-1	METHYL ISOBUTYL KETONE	ug/kg	2.8 U	2.8 U	2.9 U	2.9 U	3.2 U	2.9 U
108-87-2	METHYLCYCLOHEXANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-09-2	METHYLENE CHLORIDE	ug/kg	5.4 J	4.8 J	5.1 J	4.9 J	5.3 J	5.8
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
100-42-5	STYRENE	ug/kg	0.5 U	0.5 U	0.52 U	0.52 U	0.57 U	0.52 U
1634-04-4	TERT-BUTYL METHYL ETHER	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
108-88-3	TOLUENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U
75-01-4	VINYL CHLORIDE	ug/kg	0.55 U	0.56 U	0.57 U	0.58 U	0.63 U	0.57 U

				Field Duplicate of MW-4				
Con Ed - Hunt		Location ID:	MW-4	MW-4A	MW-4	SB-1	SB-1	SB-2
Validated Soil	Analytical Data	Sample ID:	MW-4(11-13)-20141002	MW-4A(11-13)-20141002	MW-4(49-51)-20141003	SB-1(7-9)-20141007	SB-1(17-19)-20141007	SB-2(9-11)-20141008
October 2014		Lab Sample Id:	F4241-03	F4241-04	F4241-05	F4241-12	F4241-13	F4241-14
SDG: F4241		Depth:	11 - 13 ft	11 - 13 ft	49 - 51 ft	7 - 9 ft	17 - 19 ft	9 - 11 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/2/2014 10:05	10/2/2014 10:15	10/3/2014 8:30	10/7/2014 13:47	10/7/2014 14:15	10/8/2014 11:25
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
	SEMIVOLATILES							
95-94-3	1,2,4,5-TETRACHLOROBENZENE	ug/kg	14.4 U	14.5 U	15 U	15.2 U	16.6 U	74.8 U
58-90-2	2,3,4,6-TETRACHLOROPHENOL	ug/kg	14.4 U	14.5 U	15 U	15.2 U	16.6 U	74.8 U
95-95-4	2,4,5-TRICHLOROPHENOL	ug/kg	25.8 U	25.9 U	26.9 U	27.2 U	29.6 U	130 U
88-06-2	2,4,6-TRICHLOROPHENOL	ug/kg	11.2 U	11.3 U	11.7 U	11.9 U	12.9 U	58.2 U
120-83-2	2,4-DICHLOROPHENOL	ug/kg	14 U	14.1 U	14.6 U	14.8 U	16.1 U	72.5 U
105-67-9	2,4-DIMETHYLPHENOL	ug/kg	20.8 U	20.9 U	21.7 U	22 U	23.9 U	110 U
51-28-5	2,4-DINITROPHENOL	ug/kg ug/kg	37.3 UJ	37.5 UJ	38.9 UJ	39.4 U	42.9 U	190 U
121-14-2	2,4-DINITROTOLUENE		11 U	11.1 U	11.5 U	11.6 U	12.6 U	57.1 U
		ug/kg						
606-20-2	2,6-DINITROTOLUENE	ug/kg	15 U	15.1 U	15.6 U	15.8 U	17.2 U 9.6 U	77.7 U 43.4 U
91-58-7	2-CHLORONAPHTHALENE	ug/kg	8.4 U	8.4 U	8.7 U	8.8 U		
95-57-8	2-CHLOROPHENOL	ug/kg	19.4 U	19.5 U	20.2 U	20.5 U	22.2 U	100 U
91-57-6	2-METHYLNAPHTHALENE	ug/kg	9.2 U	9.3 U	9.6 U	9.8 U	10.6 U	48 U
95-48-7	2-METHYLPHENOL (O-CRESOL)	ug/kg	19.9 U	20 U	20.8 U	21.1 U	22.9 U	100 U
88-74-4	2-NITROANILINE	ug/kg	16.3 U	16.4 U	17 U	17.2 U	18.7 U	84.5 U
88-75-5	2-NITROPHENOL	ug/kg	17.7 U	17.8 U	18.5 U	18.7 U	20.4 U	91.9 U
	3- AND 4- METHYLPHENOL (TOTAL)	ug/kg	19 U	19.2 U	19.9 U	20.1 U	21.9 U	98.8 U
91-94-1	3,3'-DICHLOROBENZIDINE	ug/kg	23.6 U	23.7 U	24.6 U	24.9 U	27.1 U	120 U
99-09-2	3-NITROANILINE	ug/kg	23.6 U	23.7 U	24.6 U	24.9 U	27.1 U	120 U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/kg	21 U	21.1 U	21.9 UJ	22.2 U	24.1 U	110 U
101-55-3	4-BROMOPHENYL PHENYL ETHER	ug/kg	7.2 U	7.2 U	7.5 U	7.6 U	8.2 U	37.1 U
59-50-7	4-CHLORO-3-METHYLPHENOL	ug/kg	16.3 U	16.4 U	17 U	17.2 U	18.7 U	84.5 U
106-47-8	4-CHLOROANILINE	ug/kg	25.9 U	26 U	27 U	27.3 U	29.7 U	130 U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/kg	19.9 U	20 U	20.8 U	21.1 U	22.9 U	100 U
100-01-6	4-NITROANILINE	ug/kg	47.8 U	48.1 U	49.8 U	50.5 U	54.9 U	250 U
100-02-7	4-NITROPHENOL	ug/kg	68.2 U	68.5 U	71.1 UJ	72 U	78.3 U	350 U
83-32-9	ACENAPHTHENE	ug/kg	10.4 U	10.4 U	10.8 U	10.9 U	11.9 U	53.7 U
208-96-8	ACENAPHTHYLENE	ug/kg	9.2 U	9.3 U	9.6 U	9.8 U	10.6 U	48 U
98-86-2	ACETOPHENONE	ug/kg	11.2 U	11.3 U	11.7 U	11.9 U	12.9 U	58.2 U
120-12-7	ANTHRACENE	ug/kg	7.5 U	97.8 J	7.8 U	7.9 U	8.6 U	38.8 U
1912-24-9	ATRAZINE	ug/kg	19.4 U	19.5 U	20.2 U	20.5 U	22.2 U	100 U
100-52-7	BENZALDEHYDE	ug/kg	19.2 U	19.3 U	20 U	20.2 U	22 U	99.4 U
56-55-3	BENZO(A)ANTHRACENE	ug/kg	88.1 J	290 J	18.3 U	18.5 U	20.1 U	880 J
50-32-8	BENZO(A)PYRENE	ug/kg	7.9 U	230 J	8.3 U	8.4 U	9.1 U	620 J
205-99-2	BENZO(B)FLUORANTHENE	ug/kg	92.1 J	270 J	12.5 U	12.7 U	13.8 U	800 J
191-24-2	BENZO(G,H,I)PERYLENE	ug/kg ug/kg	14.9 U	120 J	15.5 U	15.7 U	17.1 U	390 J
207-08-9	BENZO(K)FLUORANTHENE	ug/kg ug/kg	17.3 U	17.4 U	13.5 U	18.3 U	17.1 U 19.8 U	460 J
85-68-7	BENZYL BUTYL PHTHALATE	ug/kg ug/kg	17.6 U	17.4 U	18.4 U	18.6 U	20.2 U	91.4 U
	BIPHENYL (DIPHENYL)		13.9 U	17.7 U	14.5 U	14.7 U	15.9 U	71.9 U
92-52-4 111-91-1		ug/kg			14.5 U 22 U	22.3 U	24.3 U	71.9 U 110 U
	BIS(2-CHLOROETHOXY) METHANE	ug/kg	21.1 U	21.3 U				
111-44-4	BIS(2-CHLOROETHYL) ETHER	ug/kg	17.6 U	17.7 U	18.4 U	18.6 U	20.2 U	91.4 U
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	ug/kg	15.2 U	15.3 U	15.8 U	16.1 U	17.4 U	78.8 U
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	ug/kg	830	670	13.5 U	140 J	14.9 U	1300 J
105-60-2	CAPROLACTAM	ug/kg	17.1 U	17.2 U	17.8 U	18 U	19.6 U	88.5 U
86-74-8	CARBAZOLE	ug/kg	8 U	8.1 U	8.4 U	8.5 U	9.2 U	41.7 U
218-01-9	CHRYSENE	ug/kg	93.6 J	260 J	17.3 U	17.6 U	19.1 U	780 J
53-70-3	DIBENZ(A,H)ANTHRACENE	ug/kg	10.6 U	10.6 U	11 U	11.2 U	12.1 U	54.8 U
132-64-9	DIBENZOFURAN	ug/kg	14.3 U	14.4 U	14.9 U	15.1 U	16.4 U	74.2 U
84-66-2	DIETHYL PHTHALATE	ug/kg	5.7 U	5.8 U	6 U	6 U	6.6 U	29.7 U
131-11-3	DIMETHYL PHTHALATE	ug/kg	570	390	350 J	410	440	51.4 U
84-74-2	DI-N-BUTYL PHTHALATE	ug/kg	28.8 U	29 U	30.1 U	30.5 U	33.1 U	150 U
117-84-0	DI-N-OCTYLPHTHALATE	ug/kg	4.2 U	4.2 U	4.4 U	4.4 U	4.8 U	21.7 U
206-44-0	FLUORANTHENE	ug/kg	200 J	530 J	7.7 U	120 J	86.4 J	1900

				Field Duplicate of MW-4				
Con Ed - Hui	nts Point	Location ID:	MW-4	MW-4A	MW-4	SB-1	SB-1	SB-2
Validated Soi	il Analytical Data	Sample ID:	MW-4(11-13)-20141002	MW-4A(11-13)-20141002	MW-4(49-51)-20141003	SB-1(7-9)-20141007	SB-1(17-19)-20141007	SB-2(9-11)-20141008
October 2014	ļ	Lab Sample Id:	F4241-03	F4241-04	F4241-05	F4241-12	F4241-13	F4241-14
SDG: F4241		Depth:	11 - 13 ft	11 - 13 ft	49 - 51 ft	7 - 9 ft	17 - 19 ft	9 - 11 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/2/2014 10:05	10/2/2014 10:15	10/3/2014 8:30	10/7/2014 13:47	10/7/2014 14:15	10/8/2014 11:25
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
86-73-7	FLUORENE	ug/kg	13.9 U	14 U	14.5 U	14.7 U	15.9 U	71.9 U
118-74-1	HEXACHLOROBENZENE	ug/kg	15 U	15.1 U	15.6 U	15.8 U	17.2 U	77.7 U
87-68-3	HEXACHLOROBUTADIENE	ug/kg	13.3 U	13.4 U	13.9 U	14.1 U	15.3 U	69.1 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	ug/kg	8.9 U	9 U	9.3 U	9.4 U	10.2 U	46.3 U
67-72-1	HEXACHLOROETHANE	ug/kg	16.4 U	16.5 U	17.1 U	17.3 U	18.8 U	85.1 U
193-39-5	INDENO(1,2,3-C,D)PYRENE	ug/kg	12.2 U	110 Ј	12.7 U	12.9 U	14 U	390 J
78-59-1	ISOPHORONE	ug/kg	12.1 U	12.2 U	12.6 U	12.8 U	13.9 U	62.8 U
91-20-3	NAPHTHALENE	ug/kg	12.7 U	12.7 U	13.2 U	13.4 U	14.5 U	65.7 U
98-95-3	NITROBENZENE	ug/kg	13.9 U	14 U	14.5 U	14.7 U	15.9 U	71.9 U
621-64-7	N-NITROSODI-N-PROPYLAMINE	ug/kg	18.5 U	18.6 U	19.3 U	19.5 U	21.2 U	95.9 U
86-30-6	N-NITROSODIPHENYLAMINE	ug/kg	8.8 U	8.9 U	9.2 U	9.3 U	10.1 U	45.7 U
87-86-5	PENTACHLOROPHENOL	ug/kg	25.1 U	25.2 U	26.2 U	26.5 U	28.8 U	130 U
85-01-8	PHENANTHRENE	ug/kg	170 J	240 J	10.3 U	86.9 J	11.4 U	1200 J
108-95-2	PHENOL	ug/kg	8.5 U	8.5 U	8.8 U	9 U	9.7 U	44 U
129-00-0	PYRENE	ug/kg	180 J	480 J	9.2 U	100 J	86.4 J	1500 J

				Field Duplicate of MW-4				
Con Ed - Hunt	s Point	Location ID:	MW-4	MW-4A	MW-4	SB-1	SB-1	SB-2
Validated Soil	Analytical Data	Sample ID:	MW-4(11-13)-20141002	MW-4A(11-13)-20141002	MW-4(49-51)-20141003	SB-1(7-9)-20141007	SB-1(17-19)-20141007	SB-2(9-11)-20141008
October 2014		Lab Sample Id:	F4241-03	F4241-04	F4241-05	F4241-12	F4241-13	F4241-14
SDG: F4241		Depth:	11 - 13 ft	11 - 13 ft	49 - 51 ft	7 - 9 ft	17 - 19 ft	9 - 11 ft
		Source:	CTECH	CTECH	CTECH	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Sampled:	10/2/2014 10:05	10/2/2014 10:15	10/3/2014 8:30	10/7/2014 13:47	10/7/2014 14:15	10/8/2014 11:25
		Validated:	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:						
	PCBS							
12674-11-2	PCB-1016 (AROCLOR 1016)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
11104-28-2	PCB-1221 (AROCLOR 1221)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
11141-16-5	PCB-1232 (AROCLOR 1232)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
53469-21-9	PCB-1242 (AROCLOR 1242)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
12672-29-6	PCB-1248 (AROCLOR 1248)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
11097-69-1	PCB-1254 (AROCLOR 1254)	ug/kg	1.6 U	1.6 U	1.7 U	1.7 U	1.9 U	1.7 U
11096-82-5	PCB-1260 (AROCLOR 1260)	ug/kg	3.7 U	3.7 U	3.8 U	3.9 U	4.2 U	3.8 U
	INORGANICS							
7429-90-5	ALUMINUM	mg/kg	8030	7780	3160	7420	8130	6700
7440-36-0	ANTIMONY	mg/kg	0.519 U	0.509 U	0.531 UJ	0.537 U	0.963 J	0.522 U
7440-38-2	ARSENIC	mg/kg	2.17	2.48	0.789 J	2.73	3.54	3.4
7440-39-3	BARIUM	mg/kg	84.8	84.4	46.2	90.3	77.1	134
7440-41-7	BERYLLIUM	mg/kg	0.596	0.536	0.218 J	0.455	0.493	0.455
7440-43-9	CADMIUM	mg/kg	0.056 U	0.055 U	0.057 U	0.057 U	0.064 U	0.056 U
7440-70-2	CALCIUM	mg/kg	10700	12100	1160	1370	8590	34000
7440-47-3	CHROMIUM, TOTAL	mg/kg	22.3	23.4	12	18.6	19.3	31.2
7440-48-4	COBALT	mg/kg	12.5	11.2	4.81	11.7	8.31	7.17
7440-50-8	COPPER	mg/kg	17.4	18.5	7.16	18.5	21	31.1
7439-89-6	IRON	mg/kg	21700	19600	9190	20700	17900	17600
7439-92-1	LEAD	mg/kg	76.6	113	6.39	53.1	121	131
7439-95-4	MAGNESIUM	mg/kg	9300	9000	1410	3270	6730	12900
7439-96-5	MANGANESE	mg/kg	301	322	261 J	322	226	238
7439-97-6	MERCURY	mg/kg	0.064	0.064	0.011 J	0.07	0.155	0.138
7440-02-0	NICKEL	mg/kg	45.2	30.7	7.66	19.8	15.4	16.9
7440-09-7	POTASSIUM	mg/kg	2410	2060	1110 J+	2880	1730	1430
7782-49-2	SELENIUM	mg/kg	0.406 J	0.478 J	0.237 U	0.489 J	0.451 J	0.283 J
7440-22-4	SILVER	mg/kg	1.41	1.25	0.53	1.35	1.2	1.16
7440-23-5	SODIUM	mg/kg	2290	2580	2320	876	1920	2500
7440-28-0	THALLIUM	mg/kg	0.25 U	0.245 U	0.256 U	0.259 U	0.287 U	0.251 U
7440-62-2	VANADIUM	mg/kg	34.4	30	14.8	25.4	22.2	27.5
7440-66-6	ZINC	mg/kg	85.9	89.6	20.6	71.5	96.1	162
57-12-5	CYANIDE	mg/kg	0.205 J	0.345	0.065 J	0.075 J	0.04 J	8.42

C E4 II	4- D-i-4	IIti ID.	SB-2	SB-3	SB-3
Con Ed - Hun	ts Point Analytical Data	Location ID: Sample ID:	SB-2 SB-2(39-41)-20141009	SB-3 SB-3(15-17)-20141009	SB-3 SB-3(35-37)-20141009
October 2014	Allalytical Data	Lab Sample Id:	F4241-15	F4241-16	F4241-17
SDG: F4241		Depth:	39 - 41 ft	15 - 17 ft	35 - 37 ft
3DG. F4241		Source:	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL
		Sampled:	10/9/2014 8:30	10/9/2014 11:25	10/9/2014 14:00
		Validated:	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:	11/12/2014	11/12/2014	11/12/2014
CAS NO.	VOLATILES	UNIIS.			
71-55-6	1,1,1-TRICHLOROETHANE	ug/kg	0.76 U	0.52 U	0.56 UJ
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/kg ug/kg	0.76 C R	0.48 U	0.50 UJ 0.51 U
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	ug/kg ug/kg	0.76 U	0.48 U 0.52 U	0.51 U 0.56 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/kg ug/kg	1.4 U	0.94 U	0.50 U
75-34-3	1,1-DICHLOROETHANE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
75-34-3 75-35-4	1,1-DICHLOROETHANE 1,1-DICHLOROETHENE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
87-61-6	1,2,3-TRICHLOROBENZENE	ug/kg ug/kg	0.76 C R	0.52 UJ	0.56 U
120-82-1	1,2,4-TRICHLOROBENZENE		R	0.52 UJ	0.56 UJ
96-12-8	* *	ug/kg	R R	0.92 UJ 0.91 U	0.97 U
96-12-8 106-93-4	1,2-DIBROMO-3-CHLOROPROPANE 1,2-DIBROMOETHANE	ug/kg	0.76 U	0.91 U 0.52 U	0.97 U 0.56 U
95-50-1	1,2-DIBROMOETHANE 1,2-DICHLOROBENZENE	ug/kg	0.76 U R	0.52 U 0.52 U	0.56 U 0.56 U
107-06-2	1,2-DICHLOROBENZENE 1,2-DICHLOROETHANE	ug/kg	0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
XYLMP	M,P-XYLENE (SUM OF ISOMERS)	ug/kg	0.76 U 9.5 J+	0.52 U 0.75 U	0.56 U 0.81 U
78-87-5	1,2-DICHLOROPROPANE	ug/kg	9.5 J+ 0.39 U	0.75 U 0.27 U	0.81 U 0.29 U
541-73-1	1,3-DICHLOROBENZENE	ug/kg	0.39 U R	0.27 U 0.39 U	0.29 U 0.41 U
106-46-7	1,4-DICHLOROBENZENE	ug/kg	R R	0.39 U 0.43 U	0.41 U 0.46 U
123-91-1	1,4-DIOXANE (P-DIOXANE)	ug/kg	150 U	100 U	110 U
		ug/kg			
591-78-6	2-HEXANONE	ug/kg	3.8 U	2.6 U	2.8 U
67-64-1	ACETONE	ug/kg	110	7.7 J	11.2 J
71-43-2 74-97-5	BENZENE	ug/kg	0.57 U	0.4 U	0.43 U
74-97-5 75-27-4	BROMOCHLOROMETHANE BROMODICHLOROMETHANE	ug/kg	0.76 U	0.52 U	0.56 U
75-25-2	BROMOFORM	ug/kg	0.76 U	0.52 U 0.77 U	0.56 U 0.83 U
75-25-2 74-83-9	BROMOFORM BROMOMETHANE	ug/kg	R 1.5 U		
74-83-9 75-15-0		ug/kg		1 U	1.1 U
56-23-5	CARBON DISULFIDE	ug/kg	11.3	0.52 U	0.56 U
108-90-7	CARBON TETRACHLORIDE CHLOROBENZENE	ug/kg	0.76 U	0.52 U 0.52 U	0.56 U 0.56 U
75-00-3	CHLOROETHANE	ug/kg	R 0.76 U	0.52 U 0.52 U	0.56 U
67-66-3	CHLOROFORM	ug/kg	0.76 U	0.52 U	0.56 U
74-87-3	CHLOROMETHANE	ug/kg	0.76 U	0.52 U 0.52 U	0.56 U
156-59-2	CIS-1,2-DICHLOROETHYLENE	ug/kg	0.76 U	0.52 U	0.56 U
10061-01-5	CIS-1,3-DICHLOROPROPENE	ug/kg	0.76 U 0.76 U	0.52 U	0.56 U
110-82-7	CYCLOHEXANE	ug/kg	0.76 U	0.52 U	0.56 U
124-48-1	DIBROMOCHLOROMETHANE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/kg ug/kg	0.76 U	0.52 U 0.52 U	0.56 U
100-41-4	ETHYLBENZENE	ug/kg ug/kg	0.76 U 47 J+	0.52 U 0.52 U	0.56 U
98-82-8	ISOPROPYLBENZENE (CUMENE)	ug/kg ug/kg	47 J+ 44.1 J+	0.52 U 0.5 U	0.56 U 0.54 U
79-20-9	METHYL ACETATE	ug/kg ug/kg	1.5 U	0.5 U 1 U	0.54 U 1.1 U
78-93-3	METHYL ETHYL KETONE (2-BUTANONE)	ug/kg ug/kg	32.9 J	3.2 U	3.5 U
108-10-1	METHYL ISOBUTYL KETONE	ug/kg ug/kg	3.8 U	2.6 U	2.8 U
108-10-1	METHYLCYCLOHEXANE	ug/kg ug/kg	2.2 J	0.52 U	0.56 U
75-09-2	METHYLENE CHLORIDE	ug/kg ug/kg	14.6	2.7 J	6.2
95-47-6	O-XYLENE (1,2-DIMETHYLBENZENE)	ug/kg ug/kg	9.9 J+	0.52 U	0.56 U
100-42-5	STYRENE	ug/kg ug/kg	9.9 J+ R	0.47 U	0.5 U
1634-04-4	TERT-BUTYL METHYL ETHER	ug/kg ug/kg	0.76 U	0.47 U	0.56 U
127-18-4	TETRACHLOROETHYLENE(PCE)	ug/kg ug/kg	0.70 C R	0.52 U	0.56 U
108-88-3	TOLUENE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
10061-02-6	TRANS-1,3-DICHLOROPROPENE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
79-01-6	TRICHLOROETHYLENE (TCE)	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
75-09-4	VINYL CHLORIDE	ug/kg ug/kg	0.76 U	0.52 U	0.56 U
15-01-4	THTTE CHEOKIDE	ug/Kg	0.70 U	U.J2 U	0.30 U

C EL II	. D	lr e ro	CD 2	CD 2	CD 2
Con Ed - Hunts Point Validated Soil Analytical Data		Location ID: Sample ID:	SB-2 SB-2(39-41)-20141009	SB-3	SB-3
October 2014		Lab Sample Id:	F4241-15	SB-3(15-17)-20141009 F4241-16	SB-3(35-37)-20141009 F4241-17
SDG: F4241		Depth:	39 - 41 ft	15 - 17 ft	35 - 37 ft
SDG: F4241		Source:	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL
		Sampled:	10/9/2014 8:30	10/9/2014 11:25	10/9/2014 14:00
		Validated:	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:	11/12/2011	11/12/2011	11/12/2011
	SEMIVOLATILES				
95-94-3	1,2,4,5-TETRACHLOROBENZENE	ug/kg	39.4 U	13.6 U	14.6 U
58-90-2	2,3,4,6-TETRACHLOROPHENOL	ug/kg	39.4 U	13.6 U	14.6 U
95-95-4	2,4,5-TRICHLOROPHENOL	ug/kg	70.3 U	24.3 U	26.2 U
88-06-2	2,4,6-TRICHLOROPHENOL	ug/kg	30.7 U	10.6 U	11.4 U
120-83-2	2,4-DICHLOROPHENOL	ug/kg	38.2 U	13.2 U	14.2 U
105-67-9	2,4-DIMETHYLPHENOL	ug/kg	56.8 U	19.6 U	21.1 U
51-28-5	2,4-DINITROPHENOL	ug/kg	100 U	35.1 U	37.9 UJ
121-14-2	2,4-DINITROTOLUENE	ug/kg	30.1 U	10.4 U	11.2 U
606-20-2	2,6-DINITROTOLUENE	ug/kg	40.9 U	14.1 U	15.2 U
91-58-7	2-CHLORONAPHTHALENE	ug/kg	22.8 U	7.9 U	8.5 U
95-57-8	2-CHLOROPHENOL	ug/kg	52.9 U	18.2 U	19.7 U
91-57-6	2-METHYLNAPHTHALENE	ug/kg	700 J	8.7 U	9.4 U
95-48-7	2-METHYLPHENOL (O-CRESOL)	ug/kg	54.4 U	18.8 U	20.2 U
88-74-4	2-NITROANILINE	ug/kg	44.5 U	15.3 U	16.5 U
88-75-5	2-NITROPHENOL	ug/kg	48.4 U	16.7 U	18 U
	H-3- AND 4- METHYLPHENOL (TOTAL)	ug/kg	52 U	17.9 U	19.3 U
91-94-1	3,3'-DICHLOROBENZIDINE	ug/kg	64.3 U	22.2 U	23.9 U
99-09-2	3-NITROANILINE	ug/kg	64.3 U	22.2 U	23.9 U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	ug/kg	57.4 U	19.8 U	21.4 UJ
101-55-3	4-BROMOPHENYL PHENYL ETHER	ug/kg	19.5 U	6.7 U	7.3 U
59-50-7 106-47-8	4-CHLORO-3-METHYLPHENOL 4-CHLOROANILINE	ug/kg	44.5 U 70.6 U	15.3 U 24.4 U	16.5 U
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	ug/kg	54.4 U	18.8 U	26.3 U 20.2 U
100-01-6	4-NITROANILINE	ug/kg ug/kg	130 U	45 U	48.5 U
100-01-0	4-NITROPHENOL	ug/kg ug/kg	190 U	64.2 U	69.2 UJ
83-32-9	ACENAPHTHENE	ug/kg ug/kg	610 J	9.7 U	10.5 U
208-96-8	ACENAPHTHYLENE	ug/kg	480 J	8.7 U	9.4 U
98-86-2	ACETOPHENONE	ug/kg	30.7 U	10.6 U	11.4 U
120-12-7	ANTHRACENE	ug/kg	1400	7.1 U	7.6 U
1912-24-9	ATRAZINE	ug/kg	52.9 U	18.2 U	19.7 U
100-52-7	BENZALDEHYDE	ug/kg	52.3 U	18 U	19.5 U
56-55-3	BENZO(A)ANTHRACENE	ug/kg	2100	16.5 U	17.8 U
50-32-8	BENZO(A)PYRENE	ug/kg	1600	7.5 U	8 U
205-99-2	BENZO(B)FLUORANTHENE	ug/kg	1500	11.3 U	12.2 U
191-24-2	BENZO(G,H,I)PERYLENE	ug/kg	750 J	14 U	15.1 U
207-08-9	BENZO(K)FLUORANTHENE	ug/kg	620 J	16.3 U	17.5 U
85-68-7	BENZYL BUTYL PHTHALATE	ug/kg	48.1 U	16.6 U	17.9 U
92-52-4	BIPHENYL (DIPHENYL)	ug/kg	37.9 U	13.1 U	14.1 U
111-91-1	BIS(2-CHLOROETHOXY) METHANE	ug/kg	57.7 U	19.9 U	21.5 U
111-44-4	BIS(2-CHLOROETHYL) ETHER	ug/kg	48.1 U	16.6 U	17.9 U
108-60-1	BIS(2-CHLOROISOPROPYL) ETHER	ug/kg	41.5 U	14.3 U	15.4 U
117-81-7	BIS(2-ETHYLHEXYL) PHTHALATE	ug/kg	35.5 U	400	13.2 U
105-60-2	CAPROLACTAM	ug/kg	46.6 U	16.1 U	17.3 U
86-74-8	CARBAZOLE	ug/kg	21.9 U	7.6 U	8.2 U
218-01-9 53-70-3	CHRYSENE DIBENZA HI ANTHRACENE	ug/kg	1900	15.7 U	16.9 U
	DIBENZ(A,H)ANTHRACENE	ug/kg	28.8 U	10 U	10.7 U
132-64-9 84-66-2	DIBENZOFURAN DIETHYL PHTHALATE	ug/kg	39.1 U 15.6 U	13.5 U 380	14.5 U 320 J
84-66-2 131-11-3	DIMETHYL PHTHALATE	ug/kg	710 J	380	320 J 460
84-74-2	DI-N-BUTYL PHTHALATE	ug/kg ug/kg	710 J 78.7 U	27.2 U	29.3 U
117-84-0	DI-N-OCTYLPHTHALATE	ug/kg ug/kg	11.4 U	3.9 U	4.2 U
206-44-0	FLUORANTHENE	ug/kg ug/kg	2900	74 J	7.5 U
200-TT-0	LOOKATIILIAL	ug/ng	2,000	7 7 3	1.5 0

Con Ed - Hunts Point		Location ID:	SB-2	SB-3	SB-3
Validated Soil Analytical Data		Sample ID:	SB-2(39-41)-20141009	SB-3(15-17)-20141009	SB-3(35-37)-20141009
October 2014		Lab Sample Id:	F4241-15	F4241-16	F4241-17
SDG: F4241		Depth:	39 - 41 ft	15 - 17 ft	35 - 37 ft
		Source:	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL
		Sampled:	10/9/2014 8:30	10/9/2014 11:25	10/9/2014 14:00
		Validated:	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:			
86-73-7	FLUORENE	ug/kg	670 J	13.1 U	14.1 U
118-74-1	HEXACHLOROBENZENE	ug/kg	40.9 U	14.1 U	15.2 U
87-68-3	HEXACHLOROBUTADIENE	ug/kg	36.4 U	12.5 U	13.5 U
77-47-4	HEXACHLOROCYCLOPENTADIENE	ug/kg	24.3 U	8.4 U	9.1 U
67-72-1	HEXACHLOROETHANE	ug/kg	44.8 U	15.4 U	16.7 U
193-39-5	INDENO(1,2,3-C,D)PYRENE	ug/kg	680 J	11.5 U	12.4 U
78-59-1	ISOPHORONE	ug/kg	33.1 U	11.4 U	12.3 U
91-20-3	NAPHTHALENE	ug/kg	360 J	11.9 U	12.9 U
98-95-3	NITROBENZENE	ug/kg	37.9 U	13.1 U	14.1 U
621-64-7	N-NITROSODI-N-PROPYLAMINE	ug/kg	50.5 U	17.4 U	18.8 U
86-30-6	N-NITROSODIPHENYLAMINE	ug/kg	24 U	8.3 U	8.9 U
87-86-5	PENTACHLOROPHENOL	ug/kg	68.5 U	23.6 U	25.5 U
85-01-8	PHENANTHRENE	ug/kg	3700	9.3 U	10.1 U
108-95-2	PHENOL	ug/kg	23.1 U	8 U	8.6 U
129-00-0	PYRENE	ug/kg	3200	8.3 U	8.9 U

Con Ed. Houte Daint		Location ID:	SB-2	SB-3	SB-3
		Sample ID:	SB-2(39-41)-20141009	SB-3(15-17)-20141009	SB-3(35-37)-20141009
Validated Soil Analytical Data			` ′	, ,	
		Lab Sample Id:	F4241-15	F4241-16	F4241-17
		Depth:	39 - 41 ft	15 - 17 ft	35 - 37 ft
		Source:	CTECH	CTECH	CTECH
		SDG:	F4241	F4241	F4241
		Matrix:	SOIL	SOIL	SOIL
		Sampled:	10/9/2014 8:30	10/9/2014 11:25	10/9/2014 14:00
		Validated:	11/12/2014	11/12/2014	11/12/2014
CAS NO.	COMPOUND	UNITS:			
	PCBS				
12674-11-2	PCB-1016 (AROCLOR 1016)	ug/kg	5 U	3.5 U	3.7 U
11104-28-2	PCB-1221 (AROCLOR 1221)	ug/kg	5 U	3.5 U	3.7 U
11141-16-5	PCB-1232 (AROCLOR 1232)	ug/kg	5 U	3.5 U	3.7 U
53469-21-9	PCB-1242 (AROCLOR 1242)	ug/kg	5 U	3.5 U	3.7 U
12672-29-6	PCB-1248 (AROCLOR 1248)	ug/kg	5 U	3.5 U	3.7 U
11097-69-1	PCB-1254 (AROCLOR 1254)	ug/kg	2.2 U	1.5 U	1.7 U
11096-82-5	PCB-1260 (AROCLOR 1260)	ug/kg	5 U	3.5 U	3.7 U
	INORGANICS				
7429-90-5	ALUMINUM	mg/kg	10100	1710	7730
7440-36-0	ANTIMONY	mg/kg	0.998 J	0.472 U	0.509 U
7440-38-2	ARSENIC	mg/kg	21.6	1.23	1.83
7440-39-3	BARIUM	mg/kg	228	12.9	73
7440-41-7	BERYLLIUM	mg/kg	0.696	0.124 J	0.477
7440-43-9	CADMIUM	mg/kg	0.682	0.051 U	0.055 U
7440-70-2	CALCIUM	mg/kg	6130	785	2090
7440-47-3	CHROMIUM, TOTAL	mg/kg	49.8	4.72	22.8
7440-48-4	COBALT	mg/kg	10.47	1.95	10.83
7440-50-8	COPPER	mg/kg	150	4.04	21.6
7439-89-6	IRON	mg/kg	26800	5340	20800
7439-92-1	LEAD	mg/kg	478	10.07	4
7439-95-4	MAGNESIUM	mg/kg	6200	1030	4100
7439-96-5	MANGANESE	mg/kg	272	68.2	152
7439-97-6	MERCURY	mg/kg	2.07	0.019	0.005 U
7440-02-0	NICKEL	mg/kg	30.1	3.24	18.9
7440-09-7	POTASSIUM	mg/kg	2940	335	3330
7782-49-2	SELENIUM	mg/kg	1.89	0.211 U	0.612 J
7440-22-4	SILVER	mg/kg	6.76	0.31 J	1.3
7440-23-5	SODIUM	mg/kg	8500	79.9 J	3540
7440-28-0	THALLIUM	mg/kg	0.34 U	0.227 U	0.246 U
7440-62-2	VANADIUM	mg/kg	32.4	6.52	32.1
7440-66-6	ZINC	mg/kg	551	16.2	41.3
57-12-5	CYANIDE	mg/kg	1.49	0.032 U	0.13 J